

Fairchild Semiconductor Product Catalog

Rev. 1

Analog & Mixed Signal

Discrete Power

Interface & Logic

Microcontrollers

Optoelectronics

RF Power

Fairchild Semiconductor, The Power Franchise®

- Product Selector Guides**
 - Analog and Mixed Signal Products** 1-1
 - Discrete Power Products** 2-1
 - Interface and Logic Products** 3-1
 - Microcontroller Products** 4-1
 - Optoelectronic Products** 5-1
 - RF Power Products** 6-1
- Packaging Information** 7-1
- Ordering Guides** 8-1
- Design Center** 9-1
- Quality Statement** 10-1
- Alphanumeric Index** 11-1

Company Information

Fairchild Semiconductor is the leading global supplier of high performance products that optimize power. Our power semiconductor solutions address the world's growing power requirements driven by an increased demand for higher performance and more efficient electronics. We offer the broadest portfolio of products that reduce power consumption while enabling longer battery life and reduced size and weight.

Fairchild is The Power Franchise®, supplying power semiconductors to the consumer, industrial, ultra-portable, communications, and automotive market segments. Fairchild provides the Global Power Resource™—a complete power design source that includes Power Systems Laboratories located worldwide, technical expertise, and online resources that address designers' specific application needs.

Analog & Mixed Signal products include Power Management, Analog Signal Processing and Data Conversion ICs. Fairchild is driving continued innovation and portfolio expansion in product areas ranging from Off-Line Switchers, DC/DC converters, PFC and PWM controllers, Battery Management, Data Converters (A/D and D/A) and Video ICs to LDOs, System management & Supervision, LCD back light drive ICs, Electronic ballast ICs, Motor ICs and Amplifiers. Fairchild also offers Microcontrollers and Application Specific Standard Products (ASSP).

Fairchild's **Discrete Power** portfolio is one of the industry's broadest, and includes leading edge SuperFET™, UltraFET®, PowerTrench® and QFET® MOSFETs, Bipolar Transistors, IGBTs, Schottky, Ultrafast, HyperFast and Stealth™ Diode, and SPM™ (Smart Power Module). Fairchild's extensive discrete packaging includes advanced small package solutions with the advantages of superior size, low package height, and excellent thermal and electrical performance.

Interface & Logic products include LVDS, GTLP, Universal Serial Bus, DIMM and 1284 standard products. Interface & Logic is also comprised of logic level translator products, TinyLogic® products, low voltage products, analog switches, bus switches and standard logic products. Fairchild's packaging solutions range from space saving MicroPak™ and DQFN packaging, to high pin count QVSOP and BGA packaging.

Optoelectronic products include optocouplers, Solid State Relays, LED lamps and displays, and infrared components. Fairchild's portfolio of industry standard and application specific devices features a variety of advanced solutions including a full-color spectrum of low power and high brightness SMD LEDs, infrared variable sensing, mini-flat packages, surface-mount LEDs and infrared, Solid State Relays and isolated error amplifiers. A complete set of safety approval certifications are available for optocoupler products.

RF products provides RF power amplifier solutions for wireless communication systems like Wi-Fi™, CDMA and WCDMA cellular handsets. RF packaging solutions include advanced small package options with a small footprint, low package profile and superior thermal and electrical performance.

Fairchild employs 9,000 people worldwide and is headquartered in South Portland, Maine. Additional U.S. design and manufacturing facilities are located in California, Pennsylvania, Colorado and Utah with manufacturing, assembly and test sites in Malaysia, Singapore, the Philippines, China and South Korea.

The Power Franchise®

Power				
AC/DC Conversion	Battery Management	DC/DC Conversion	Monitoring/Supervisory	Other Power Applications
Battery Charger Support	Microcontrollers	DC Boost Converters	Microcontrollers	Ballast Controllers
Diodes	Battery Chargers	DC/DC Conversion ICs	Supervisory Circuits	Ground Fault Interrupt
Fairchild Power Switches	Diodes	Diodes	Temperature Sensors	IGBTs
IGBTs	MOSFETs	Linear Regulators	Voltage Detectors	MOSFETs
MOSFETs	Optically Isolated Error Amplifiers	MOSFETs		Motor Drivers/Controllers
Optically Isolated Error Amplifiers	Optocouplers	Optically Isolated Error Amplifiers		Multiplexer/Register for Microprocessor VID
Optocouplers	Rectifiers	Optocouplers		Solid State Relays
PFC/PWM Combinations	Temperature Sensors	Rectifiers		Supervisory ICs
Power Factor Correction				Transistors
PWM and Phase Modulation Controllers				TRIAC Optocouplers
Rectifiers				
Voltage References				

Input	
Analog Input and Processing	
ADCs	Timers
Amplifiers	Video Processors
Analog Switches	Voltage References
Comparators	Voltage to Frequency Converters
Multipliers	
Optocouplers	
Interface	
1284 Transceivers	LVDS
Advanced Logic	Memory Module Drivers
Bus Switches	Optocouplers
GTL	USB Transceivers
Low Voltage Logic	
Optical	
Infrared Products	Solid State Relays

Processors
Microcontroller

Logic
Bus Switches
Low Voltage Logic
Standard Logic
TinyLogic®

Output	
Analog	
Amplifiers	Encoders
Analog Switches	Optocouplers
Comparators	Power Amplifiers
DACs	Video Filters/Drivers
Interface	
1284 Transceivers	LVDS
Advanced Logic	Memory Module Drivers
Bus Switches	Optocouplers
GTL	USB Transceivers
Low Voltage Logic	
Optical	
Infrared Products	LED Lamps
LED Displays	Solid State Relays
LED Drivers	
RF	
Power Amplifiers	

Support		
Discrete	Sensing	Feedback & Control
Diodes	Infrared Products	Infrared Products
JFETs	Optocouplers	Optocouplers
MOSFETs	Temperature Sensors	Solid State Relays
Rectifiers		
Transistors		

Fairchild Semiconductor's Product Tree

Analog & Mixed Signal

Analog Signal Processing

- Amplifiers
- Comparators
- Power Amplifiers
- Voltage to Frequency Converters

Application Specific ICs

- Ballast ICs
- CCFL Backlight ICs
- Ground Fault Interrupt ICs
- Motor ICs
- Multiplexer/Register for Microprocessor VID

Data Conversion

- Analog to Digital Converters (ADCs)
- Digital to Analog Converters (DACs)

Interface and Switches

- DIMM
- GTL
- IEEE1284
- LVDS
- USB
- Switches

Power Management

- LED Drivers
- Linear Regulators
- AC/DC Conversion ICs
- DC/DC Conversion ICs
- PWM and Phase Modulation Controllers (AC/DC and DC/DC)
- Supervisory Circuits
- Voltage References and Shunts

Special Function ICs

- Landing Correction ICs
- Vertical Output ICs
- Voltage Stabilizers

Thermal Management

- Temperature Sensors

Timing Circuits

- Temperature Sensors

Video ICs

- Analog Filters and Buffers
- Decoder and Genlocks
- Digital Video Filters and Mixers
- Digital Video Memories
- Digital Video Processors
- Encoders
- Video Demo Boards

Discrete Power

Bipolar Power Transistors & JFETs

Diodes & Rectifiers

IGBTs

- Discrete IGBT
- Ignition IGBT
- IGBT Modules
- SPM™ (Smart Power Module)

MOSFETs

- Load Switches
- Power MOSFETs
- MOSFET/Schottky Combos

TRIACs

Interface & Logic

Interface

- DIMM
- GTL
- IEEE1284
- LVDS
- USB

Logic

- Low Voltage Logic
- Standard Logic
- TinyLogic®

Switches

- Analog Switches
- Bus Switches

Microcontrollers

Optoelectronics

Infrared Products

LED Lamps & Displays

Optocouplers

Solid State Relays

RF Power

Basestation

Cellular Handsets

Millimeter Wave/Wideband

Wireless LAN

Analog and Mixed Signal Products

Analog Signal Processing

- Amplifiers 1-3
- Comparators 1-5
- Power Amplifiers 1-6
- Voltage to Frequency Converters 1-7

Application Specific ICs

- Ballast ICs 1-8
- CCFL Backlight ICs 1-9
- Ground Fault Interrupt ICs 1-10
- Motor ICs 1-11
- Multiplexer/Register for Microprocessor VID 1-14

Data Conversion

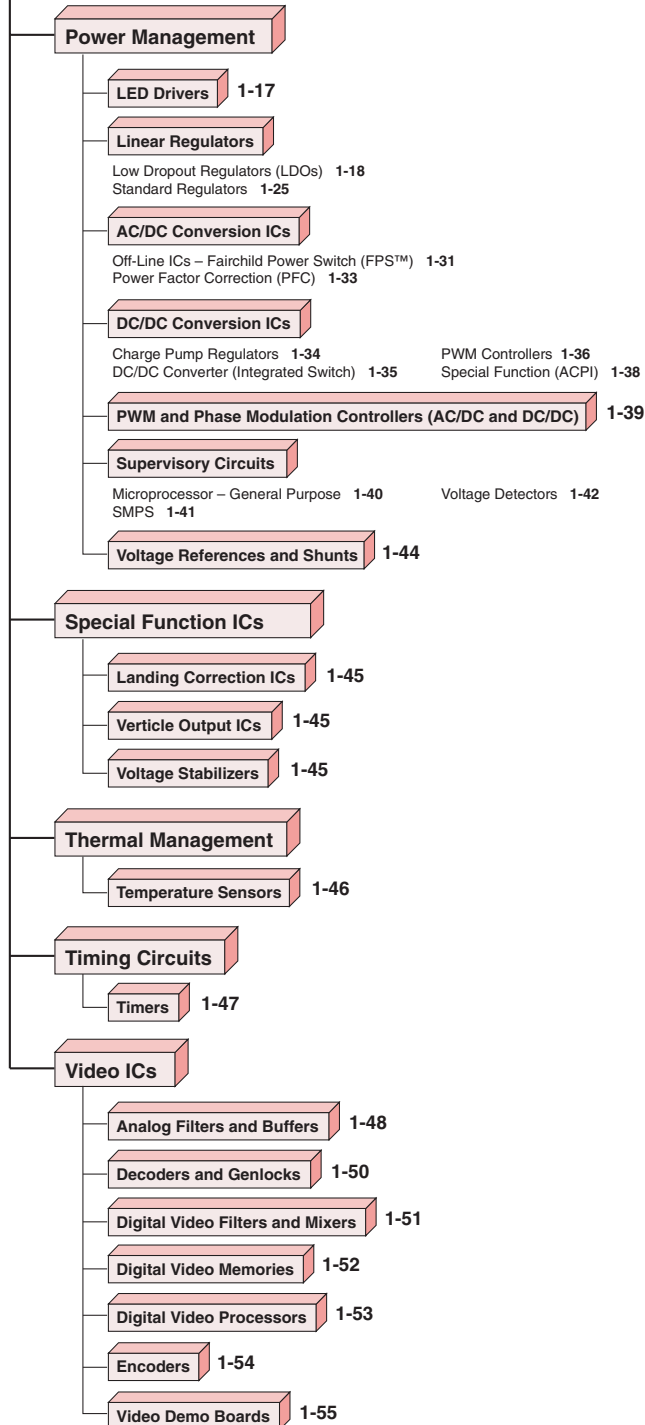
- Analog to Digital Converters (ADCs) 1-15
- Digital to Analog Converters (DACs) 1-16

Interface and Switches

- DIMM 3-3
- GTL P 3-4
- IEEE 1284 3-5
- LVDS 3-6
- USB 3-8
- Switches 3-110

Continued on Next Page

Analog and Mixed Signal Products (Continued)



Amplifiers

Products	Number of Amps	Power Down	CMIR incl Rail	RRIO	Bandwidth Typ (MHz)	Slew Rate Typ (V/ μ s)	Supply Current Typ (mA)	Output Current Typ (mA)	Input Voltage Noise Typ (nV/ $\sqrt{\text{Hz}}$)	Input Offset Voltage Typ (mV)	Typ. Input Bias Current (nA)	Open Loop Gain Typ (dB)	Supply Voltage		Temp Range
													Min	Max	
FAN4113	1	No	Yes	Output	36	8	0.75	13	12	0.5	400	70	1.2	5.5	-40 to +85
FAN4174	1	No	Yes	Both	5	3	0.2	33	21	1	0.005	102	2.5	5.5	-40 to +85
FAN4272	2	No	Yes	Both	4	9	0.16	30	32	0.25	90	80	2.5	5.5	-40 to +125
KA1458	2	No	No	No	–	0.5	2.3	20	–	2	80	106	–	36	0 to +70
KA224	4	No	No	No	–	–	0.7	40	–	1.5	40	88	3	32	-25 to +85
KA224A	4	No	No	No	–	–	0.7	40	–	1.5	40	88	3	32	-25 to +85
KA248	4	No	No	No	1	0.5	2.4	25	–	1	30	84	–	36	-25 to +85
KA258	2	No	No	No	–	–	0.5	–	–	2.9	45	88	–	32	-25 to +85
KA258A	2	No	No	No	–	–	0.5	–	–	2.9	45	88	–	32	-25 to +85
KA2902	4	No	No	No	–	–	0.7	40	–	1.5	40	84	3	26	-40 to +85
KA2904	2	No	No	No	–	–	0.5	–	–	2.9	45	84	–	26	-40 to +85
KA301A	1	No	No	No	–	10	2	–	–	2	60	84	–	36	0 to +70
KA324	4	No	No	No	–	–	0.7	40	–	1.5	40	84	3	32	0 to +70
KA3303	4	No	No	No	1	0.4	2.8	30	–	1.5	30	84	3	36	0 to +70
KA334	2	No	No	No	0.35	1	7.5	–	–	15	50	75	8	56	0 to +70
KA3403	4	No	No	No	1	0.4	2.3	20	–	1.5	30	84	3	36	0 to +70
KA348	4	No	No	No	1	0.5	2.4	25	–	1	30	84	–	36	0 to +70
KA358	2	No	No	No	–	–	0.8	–	–	2.9	45	84	3	32	0 to +70
KA358A	2	No	No	No	–	–	0.8	–	–	2.9	45	84	–	32	0 to +70
KA4558	2	No	No	No	–	1.2	3.5	–	–	2	30	106	–	44	0 to +70
KA5532	2	No	No	No	10	8	6	38	5	0.5	200	67	–	44	0 to +70
KA741	1	No	No	No	–	0.5	1.5	25	–	2	80	106	–	36	0 to +70
KF347	4	No	No	No	4	13	7.2	–	20	5	0.05	84	–	36	0 to +70
KF351	1	No	No	No	4	13	2.3	–	–	5	0.05	84	–	36	0 to +70
KF353	2	No	No	No	4	13	3.6	–	16	5	0.05	84	–	36	0 to +70
KM4100	1	No	Yes	Output	260	150	4.2	90	16	1.4	3000	78	2.5	5.5	-40 to +85
KM4101	1	Yes	Yes	Output	260	150	4.2	90	16	1.4	3000	78	2.5	5.5	-40 to +85
KM4110	1	No	Yes	Output	75	50	0.5	30	12	1	1200	80	2.5	5.5	-40 to +85
KM4111	1	No	Yes	Output	35	27	0.2	13	21	1.5	370	62	2.5	5.5	-40 to +85
KM4112	1	No	Yes	Output	7.3	9	0.07	9	29	1	90	76	2.5	5.5	-40 to +85
KM4120	1	Yes	Yes	Output	75	50	0.5	30	12	1	1200	80	2.5	5.5	-40 to +85
KM4170	1	No	Yes	Both	4.3	9	0.16	30	22	1.5	90	80	2.5	5.5	-40 to +85

Amplifiers (Continued)

Products	Number of Amps	Power Down	CMIR incl Rail	RRIO	Bandwidth Typ (MHz)	Slew Rate Typ (V/ μ s)	Supply Current Typ (mA)	Output Current Typ (mA)	Input Voltage Noise Typ (nV/ \sqrt Hz)	Input Offset Voltage Typ (mV)	Typ. Input Bias Current (nA)	Open Loop Gain Typ (dB)	Supply Voltage		Temp Range
													Min	Max	
KM4200	2	No	Yes	Output	260	145	4.2	85	16	1.4	3000	78	2.5	5.5	-40 to +85
KM4212	2	No	Yes	Output	7.3	9	0.07	9	29	1	90	76	2.5	5.5	-40 to +85
KM4270	2	No	Yes	Both	4.3	9	0.16	30	22	1.5	90	80	2.5	5.5	-40 to +85
KM7101	1	No	Yes	Both	4.3	9	0.16	30	22	1.5	90	80	2.5	5.5	-40 to +85
L272	2	No	No	No	0.35	1	7.5	–	–	15	50	75	8	56	0 to +70
LF347	4	No	No	No	4	13	7.2	–	20	5	0.05	84	–	36	0 to +70
LF351	1	No	No	No	4	13	2.3	–	–	5	0.05	84	–	36	0 to +70
LF353	2	No	No	No	4	13	3.6	–	16	5	0.05	84	–	36	0 to +70
LM1458	2	No	No	No	–	0.5	2.3	20	–	2	80	106	–	36	0 to +70
LM224	4	No	No	No	–	–	0.7	40	–	1.5	40	88	3	32	-25 to +85
LM258	2	No	No	No	–	–	0.5	–	–	2.9	45	88	–	32	-25 to +85
LM258A	2	No	No	No	–	–	0.5	–	–	2.9	45	88	–	32	-25 to +85
LM2902	4	No	No	No	–	–	0.7	40	–	1.5	40	84	3	26	-40 to +85
LM2904	2	No	No	No	–	–	0.5	–	–	2.9	45	84	–	26	-40 to +85
LM301A	1	No	No	No	–	10	2	–	–	2	60	84	–	36	0 to +70
LM324	4	No	No	No	–	–	0.7	40	–	1.5	40	84	3	32	0 to +70
LM324A	4	No	No	No	–	–	0.7	40	–	1.5	40	84	3	32	0 to +70
LM348	4	No	No	No	1	0.5	2.4	25	–	1	30	84	–	36	0 to +70
LM358	2	No	No	No	–	–	0.8	–	–	2.9	45	84	3	32	0 to +70
LM358A	2	No	No	No	–	–	0.8	–	–	2.9	45	84	–	32	0 to +70
LMV321	1	No	Yes	Output	3.1	1.5	0.1	30	33	1	1	70	2.5	5.5	-40 to +125
LMV324	4	No	Yes	Output	3.1	1.5	0.1	30	33	1	1	70	2.5	5.5	-40 to +125
LMV358	2	No	Yes	Output	3.1	1.5	0.1	30	33	1	1	70	2.5	5.5	-40 to +125
MC3303	4	No	No	No	1	0.4	2.8	30	–	1.5	30	84	3	36	0 to +70
MC3403	4	No	No	No	1	0.4	2.3	20	–	1.5	30	84	3	36	0 to +70
NE5532	2	No	No	No	10	8	6	38	5	0.5	200	67	–	44	0 to +70
RC6333	3	No	No	No	90	300	8.67	135	–	3	1000	75	9.5	10.5	0 to +70
RC6334	4	No	No	No	175	250	8.25	135	–	3	1000	75	9.5	10.5	0 to +70

Comparators

Products	Input Bias Current Max (nA)	Voltage Gain Typ (V/mV)	Response Time (ns)	Package	Input Offset Current Max (nA)	Number of Comparators	Supply Voltage (±) (V)	Supply Current Typ (mA)	Input Offset Voltage Max (mV)
KA239	250	200	1400	DIP SOP	50	4	18 36	1.1	5
KA239A	250	200	1400	DIP SOP	50	4	18 36	1.1	2
KA2901	250	100	1400	DIP SOP	50	4	18 36	1.1	7
KA2903	250	100	1500	DIP SOIC	50	2	18 36	0.6	7
KA311	250	200	200	DIP SOIC	50	1	36	3	7.5
KA319	1000	40	80	DIP SOP	200	2	36	3.6	8
KA3302	250	30	1400	DIP SOP	100	4	14 28	2	20
KA339	250	200	1400	DIP SOP	50	4	18 36	1.1	5
KA339A	250	200	1400	DIP SOP	50	4	18 36	1.1	2
KA393	250	200	1400	DIP SOIC	50	2	18 36	0.6	5
LM239A	250	200	1400	DIP SOP	50	4	18 36	1.1	2
LM2901	250	100	1400	DIP SOP	50	4	18 36	2	7
LM2903	250	100	1500	DIP SOIC	50	2	18 36	0.6	7
LM2903I	250	100	1500	DIP SOIC	50	2	18 36	0.6	7
LM311	250	200	200	DIP SOIC	50	1	36	3	7.5
LM319	1000	40	80	DIP SOP	200	2	36	3.6	8
LM3302	250	30	1400	DIP SOP	100	4	14 28	2	20
LM339	250	200	1400	DIP SOP	50	4	18 36	2	5
LM339A	250	200	1400	DIP SOP	50	4	18 36	2	5
LM393	250	200	1400	DIP SOIC	50	2	18 36	0.6	5
LM393A	250	200	1400	DIP SOIC	50	2	18 36	0.6	5
SPT9689	–	–	–	PLCC	–	2	–	–	10

Power Amplifiers

Products	V _{CC} (V)		Output Power (Watts)	Number of Channels	Auxiliary Headphone Drive	Mute	Thermal Shutdown	Load Mode	Shutdown	Package	Pins
	Min	Max									
FAN7000D	1.8	4	0.04	2	Yes	Yes	No	SE	Yes	SSOP	10
FAN7005	2.7	5.5	0.2	2	Yes	No	Yes	SE	Yes	MSOP SOIC	8
FAN7021	2	6	1	1	No	No	Yes	BTL	Yes	SOIC	8
FAN7023	2	6	1	1	No	No	Yes	BTL	Yes	MSOP SOIC	–
FAN7024	2	6	0.68	1	No	No	Yes	BTL	Yes	MSOP	–
FAN7031	2.7	5.5	2	2	Yes	No	Yes	BTL	Yes	eTSSOP	20
FAN7033MP	2.7	5.5	2	2	Yes	No	Yes	BTL	Yes	–	–

Voltage to Frequency Converters

Products	Supply Voltage (V)		Non-Linearity (%)	Dynamic Range (dB)	Full Scale Frequency		Package	Leads
	Min	Max			Min (Hz)	Max (KHz)		
KA331	4	40	0.01	100	1	100	DIP	8

Ballast ICs

Products	Startup Current Max (mA)	Reference Voltage Tolerance (±%)	V _{CC} (V)		Frequency	Output Peak Current		Special Functions	
			On	Off	Max (kHz)	Sink (A)	Source (A)	Dimming	Soft Start
KA7541	0.25	1.5	12.5	10.7	60	0.3	0.3	–	Yes

CCFL Backlight ICs

Products	Package	Pin Count
FAN7300	SSOP	20
FAN7310	SSOP	20
FAN7548	SSOP	20

Ground Fault Interrupt ICs

Products	Description	AC Line Powered	Line Voltage (V)		Supports UL943	Output SCR Trigger Voltage (V)	Trigger Output Current (µA)	Response Time (mS)	Sense Transformers	Package	Leads	Lead Free
			Min	Max								
KA2803B	Earth Leakage Detector	Yes	100	200	–	0.8	400	2	1	DIP SOIC	8	No Yes
KA2807	Earth Leakage Detector	–	120	120	Yes	–	500	18	2	DIP	8	No
RV4141A	Low Power Ground Fault Interrupt Controller	Yes	110	220	Yes	2.4	500	2	2	DIP SOIC	8	No
RV4145A	Low Power Ground Fault Interrupt Controller	Yes	120	220	Yes	1.3	200	–	–	DIP SOIC	8	No

Motor ICs

Products	Number of Drive Channels	Control Method	Output Current (A)	Motor Type	Applications	Package	Lead Free
FAN8000D	4	Linear	1	DC Actuator	CD Player	SSOP	No
FAN8001BD	5	Linear	–	DC Actuator	CD Player	SSOP	No
FAN8004	5	Linear	–	DC Actuator	CD Player	QFP	No
FAN8006D3	4	Linear	–	DC Actuator	CD+Media	SSOP	No
FAN8010MP	1	Linear	–	DC	DSC	–	No
FAN8024BD	4	Linear	–	DC Actuator	CD-ROM	SSOP	No
FAN8024CD	4	Linear	–	DC Actuator	CD-ROM	SSOP	No
FAN8025G3	4	Linear	–	DC Actuator	DVD Player	SSOP	No
FAN8026G3	5	Linear	–	DC Actuator	DVD Player	SSOP	Yes
FAN8033	6	Linear	1	DC Actuator	CD Player	QFP	No
FAN8035	6	Linear	–	DC Actuator	DVD Player	QFP	Yes
FAN8037	7	Linear	1	DC Actuator	CD Player	QFP	No
FAN8037B	7	Linear	–	DC Actuator	CD Player	QFP	No
FAN8038B	4	Linear	1	DC Actuator	CD Player	QFP	Yes
FAN8038C	4	Linear	–	DC Actuator	CD Player	QFP	No
FAN8039BD3	5	Linear	–	DC Actuator	CD Player	SSOP	No
FAN8042	5	Linear	–	DC Actuator	DVD Player	QFP	No
FAN8045G3	4	Linear	–	DC Actuator	DVD Player	SSOP	No Yes
FAN8047G3	4	Linear	–	DC Actuator	DVD Player	SSOP	No Yes
FAN8048	4	Linear	–	DC Actuator	CD Player	–	No
FAN8082	1	Linear	1.6	DC Actuator	DC Motor	DIP	No

Motor ICs (Continued)

Products	Number of Drive Channels	Control Method	Output Current (A)	Motor Type	Applications	Package	Lead Free
FAN8082D	1	Linear	0.8	DC Actuator	DC Motor	SOIC	No
FAN8100MTC	2	Linear	–	DC	General	–	No
FAN8100N	2	Linear	–	DC	General	–	No
FAN8200	2	Linear	–	Step	General	DIP	No
FAN8200D	2	Linear	–	Step	General Camera	SOP	Yes
FAN8200MTC	2	Linear	–	Step	General Camera	–	No
FAN8400BD3	1	Linear	–	BLDCM	LBP	SSOP	No
FAN8403D3	1	Linear	–	BLDCM	LBP	SSOP	No
FAN8404D	–	–	–	BLDC	DC Cooling Fan	SOIC	No
FAN8408D	–	–	–	BLDC	DC Cooling Fan	SOIC	No
FAN8412M	–	–	–	–	DC Cooling Fan	SOIC	No
FAN8413M	–	–	–	–	DC Cooling Fan	SOIC	No
FAN8420D3	1	Linear	1.3	BLDCM	CD-ROM	SSOP	No
FAN8422G	1	Linear	–	BLDCM	FDD	SOP	No
FAN8423D3	1	Linear	1.3	BLDCM	CD-ROM	SSOP	No
FAN8434	3	Linear	–	BLDCM DC	VCR CD Player	–	No
FAN8460MTC	–	–	–	–	DC Cooling Fan	–	No
FAN8461G	–	–	–	–	DC Cooling Fan	SSOP	No
FAN8486D	1	Linear	1	BLDCM	VCR (Drum)	SSOP	No
FAN8702	6	Linear	–	DC	DSC	–	No
FAN8727	5	Linear	1.3	BLDCM DC	DVD Player	QFP	No
FAN8728	4	Linear	–	BLDCM DC	DVDP	QFP	No
FAN8729	4	Linear	–	BLDCM DC	DVDP	QFP	No
FAN8732BG	6	Linear	–	BLDCM DC	CD-ROM	–	No
FAN8732CG	6	Linear	–	BLDCM DC	CD-ROM	–	No
FAN8732G	6	Linear	–	BLDCM DC	CD-ROM	–	No
FAN8741	7	PWM	–	BLDCM DC	DVD-RW	–	Yes
KA2822BD	1	Linear	–	BLDCM	FDD	SSOP	No
KA2822CD	1	Linear	–	BLDCM	FDD	SSOP	No

Motor ICs (Continued)

Products	Number of Drive Channels	Control Method	Output Current (A)	Motor Type	Applications	Package	Lead Free
KA2822D	1	Linear	1	BLDCM	FDD	SSOP	No
KA3011BD	1	Linear	1.3	BLDCM	CD-ROM	SSOP	No
KA3012D02	4	Linear	–	DC Actuator	CD Player	SSOP	No
KA3022D3	4	Linear	1	DC Actuator	CD-ROM	SSOP	No
KA3030D	6	Linear	1	DC Actuator	CD Player	SSOP	No
KA3031	6	Linear	1	DC Actuator	CD Player	QFPH	No
KA3050	4	Linear	0.5	DC Step	Camera	QFP	No
KA3080BD3	1	Linear	–	BLDCM	VCR (Capstan)	SSOP	No
KA3080C	1	Linear	–	BLDCM	VCR (Capstan)	SIP	No
KA3082B	1	Linear	–	DC	VCR CD Player	SIP	No
KA3084D	1	Linear	1	BLDCM	VCR (Drum)	SOP	No
KA3100D	2	Linear	1	Step	FDD Camera	SOP	Yes
KA8301L	1	Linear	1.6	DC	VCR (Loading)	SIP	No
KA9258CD	4	Linear	–	DC Actuator	CD Player	SSOP	No
KA9258D	4	Linear	1	DC Actuator	CD Player	SSOP	No
KA9259ED	5	Linear	1	DC Actuator	CD Player	SSOP	No
KA9259HD	5	Linear	–	DC Actuator	CD Player	SSOP	No

Multiplexer/Register for Microprocessor VID

Products	Family	V _{CC} Min (V)	V _{CC} Max (V)	Output Level	Number of Registers	Security Controller	Package	Leads
FM3560	VID	3.3	5.5	Open Collector Fixed 2.5V	3	No	SOIC-Wide TSSOP	20
FM3570	VID	3.3	5.5	Open Collector	3	No	SOIC-Wide TSSOP	20

Analog to Digital Converters (ADCs)

Products	Number of Converters	Resolution (Bits)	Conversion Rate (MSPS)	ILE	DLE	Power consumption (mW)	SNR Typ	Output	Supply Voltage	
									Analog	Digital
SPT7721	1	8	250	1.7	1.05	310	43@70 MHz	TTL/CMOS	5	5
SPT7722	1	8	250	1.2	0.4	450	46@70 MHz	TTL/CMOS	5	5
SPT7734	1	8	40	1	0.5	175	49@3.58 MHz	TTL/CMOS	5	5
SPT7855	1	10	25	1	0.5	135	57@3.58 MHz	TTL	5	5
SPT7860	1	10	40	1	0.5	175	54@3.58 MHz	TTL	5	5
SPT7861	1	10	40	1	0.5	160	57@10 MHz	TTL	5	5
SPT7863	1	10	40	1	0.5	160	57@3.58 MHz	TTL	5	5
SPT7883	1	10	70	0.55	0.35	129	59.5@10 MHz	CMOS	2.5	2.5
SPT8100	1	16	5	1.25	0.5	465	81@.075 MHz	CMOS	5	5
TMC1103x20	3	8	20	0.5	0.5	472	–	–	–	5
TMC1103x40	3	8	40	0.5	0.5	630	–	–	–	5
TMC1103x50	3	8	50	0.5	0.5	709	–	–	–	5
TMC1175x20	1	8	20	0.5	0.5	158	–	–	5	5
TMC1175x30	1	8	30	0.5	0.5	184	–	–	5	5
TMC1175x40	1	8	40	0.5	0.5	210	–	–	5	5
TMC1203x40	3	8	40	0.5	0.5	630	–	–	5	5
TMC1203x50	3	8	50	0.5	0.5	709	–	–	5	5

Digital to Analog Converters (DACs)

Products	Number of Converters	Resolution (Bits)	Conversion Rate (MWPS)	ILE	DLE	Power Consumption (W)	Glitch Energy (pV)	Settling Time (ns)	Input	Supply Voltage	
										Analog	Digital
FMS3110	3	10	100	1	1	655	–	–	–	–	5
FMS3810	3	8	100	0.5	0.5	655	–	–	–	–	5
FMS3815	3	8	150	0.5	0.5	655	–	–	–	–	5
FMS3818	3	8	180	0.5	0.5	300	–	–	–	–	3.3
SPT5240	1	10	400	1.3	0.9	140	2.23	104	CMOS	3	3
SPT5420	8	8x13	–	0.5	0.3	198	–	15	TTL	11.5	5
TMC3003x30	3	10	30	1	1	525	–	–	–	–	5
TMC3003x50	3	10	50	1	1	525	–	–	–	–	5
TMC3003x80	3	10	80	1	1	656	–	–	–	–	5
TMC3033x80	3	10	80	1	1	435	–	–	–	–	3.3
TMC3503x30	3	8	30	0.5	0.5	525	–	–	–	–	5
TMC3503x50	3	8	50	0.5	0.5	525	–	–	–	–	5
TMC3503x80	3	8	80	0.5	0.5	655	–	–	–	–	5
TMC3533x30	3	8	30	0.25	0.25	330	–	–	–	–	3.3
TMC3533x50	3	8	50	0.25	0.25	330	–	–	–	–	3.3
TMC3533x80	3	8	80	0.25	0.25	346	–	–	–	–	3.3

LED Drivers

Products	Package	Driver Only	Driver with Boost	Current Matching Accuracy (%)	Number of LEDs	Max LED Driving Current (mA)	Input Voltage (V)	Ground Current (mA)	Ground Current in OFF mode (µA)	Serial Driver	Brightness Control	Parallel Driver
FAN5606	MLP	No	Inductor Based	3	6	20	2.7–5	0.1	1	Yes	Analog, PWM, Digital	No
FAN5607	MLP	No	Switched Capacitor	3	4	30	2.7–5.5	2	1.5	No	Analog, PWM	Yes
FAN5608	MLP	No	Inductor Based	3	12	20	2.7–5	0.1	1	Yes	Analog, PWM, Digital	Yes
FAN5609	MLPITSSOP	No	Switched Capacitor	5	4	20	2.7–5.5	2	1.5	No	PWM, Digital	Yes
FAN5610	MLP	Yes	–	7.5	4	20	2.7–5.5	0.02	<1	No	PWM, Digital	Yes
FAN5611	SC70	Yes	–	3	4	40	3.3–5.5	0.1	<1	No	Analog, PWM	Yes
FAN5612	SC70	Yes	–	3	3	40	3.3–5.5	0.1	<1	No	Analog, PWM	Yes
FAN5613	–	Yes	–	3	4	40	3.3–5.5	0.1	<1	No	Analog, PWM	Yes
FAN5614	SC70	Yes	–	3	2	80	3.3–5.5	0.1	<1	No	Analog, PWM	Yes

Linear Regulators – Low Dropout Regulators

Products	Output Type	Output Voltage Typ (V)	Adj. Output Voltage		Output Current (A)	Dropout Voltage (V)	Package	Input Voltage Max	Lead Free
			Min (V)	Max (V)					
FAN1084	Single	ADJ 1.5 3.3	1.25	5.7	4.5	1.5	TO-220AB TO-252(DPAK) TO-263(D ² PAK)	7	No
FAN1086	Single	ADJ 2.5 2.85 3.3 5	1.25	5.5	1.5	1.5	SOT-223 TO-252(DPAK) TO-263(D ² PAK) TO-252(DPAK) TO-263(D ² PAK)	7.5	No
FAN1112	Single	1.2	–	–	1	1.2	SOT-223 TO-252(DPAK)	18	No Yes
FAN1117A	Single	ADJ 1.8 2.5 2.85 3.3 5	1.25	18	1	1.1	SOT-223 TO-220AB TO-252(DPAK) TO-252(DPAK) TO-252(DPAK) TO-252(DPAK)	17	No Yes
FAN1538	Dual	3.3	1.4	3.3	1	1.2	SPAK TO-252(DPAK)	7	No
FAN1539	Single	3.3	–	–	1	1.2	MLP	7	Yes
FAN1540	Single	3.3, 1.8	–	–	1.3	1.2	MLP TO-252(DPAK) TO-252(DPAK)	7	Yes No
FAN1581	Single	ADJ 1.5 2.5	1.25	5.7	5	0.6	TO-220 TO-252(DPAK) TO-263(D ² PAK)	7	No
FAN1582	Single	ADJ 1.5 2.5	1.25	5.7	3	0.6	TO-263(D ² PAK)	7	No
FAN1585A	Single	ADJ 1.5	1.25	7	5.4	1.3	TO-220AB TO-263(D ² PAK) TO-263(D ² PAK)	7	No
FAN1587A	Single	ADJ 1.5 3.3	1.5	3.6	3	1.3	TO-220AB TO-252(DPAK) TO-263(D ² PAK) TO-263(D ² PAK)	12	No
FAN1589	Single	1.2	–	–	2.7	1.3	TO-220AB TO-252(DPAK) TO-263(D ² PAK)	7	No

Linear Regulators – Low Dropout Regulators (Continued)

Products	Output Type	Output Voltage Typ (V)	Adj. Output Voltage		Output Current (A)	Dropout Voltage (V)	Package	Input Voltage Max	Lead Free
			Min (V)	Max (V)					
FAN1616A	Single	ADJ 1.8 2.5 3.3 5	1.25	18	0.5	1.1	SOT-223 TO-252(DPAK)	18	No Yes
FAN1655	Single	DDR VTT	1.1	1.8	3	1.1	MLP SOIC eTSSOP	3.6	Yes No
FAN1951	Single	1.8	–	–	1.5	0.5	TO-252(DPAK)	14	No
FAN2500	Single	ADJ 2.5 2.6 2.7 2.8 2.85 3 3.3	1.32	7	0.1	0.1	SOT-23	7	No
FAN2501	Single	2.5 2.6 2.7 2.8 2.85 3 3.3	–	–	0.1	0.1	SOT-23	7	No
FAN2502	Single	ADJ 2.5 2.6 2.7 2.8 2.85 3 3.3	1.32	7	0.15	0.15	SOT-23	7	Yes No
FAN2503	Single	2.5 2.6 2.7 2.8 2.85 3 3.3	–	–	0.15	0.15	SOT-23	7	No

Linear Regulators – Low Dropout Regulators (Continued)

Products	Output Type	Output Voltage Typ (V)	Adj. Output Voltage		Output Current (A)	Dropout Voltage (V)	Package	Input Voltage Max	Lead Free
			Min (V)	Max (V)					
FAN2504	Single	ADJ 2.5 2.6 2.7 2.8 2.85 3 3.3	1.32	7	0.2	0.2	SOT-23	7	No
FAN2505	Single	2.5 2.6 2.7 2.8 2.85 3 3.3	–	–	0.2	0.2	SOT-23	7	No
FAN2508	Single	ADJ 2.5 2.6 2.7 2.8 2.85 3 3.3	1.8	7	0.05	0.05	SOT-23	7	No
FAN2509	Single	2.5 2.6 2.7 2.8 2.85 3 3.3	–	–	0.05	0.05	SOT-23	7	No
FAN2510	Single	ADJ 2.5 2.6 2.7 2.8 2.85 3 3.3	1.32	7	0.1	0.1	SOT-23	7	No
FAN2511	Single	2.5 3.3 2.6 2.7 2.8 2.85 3	–	–	0.1	0.1	SOT-23	7	No

Linear Regulators – Low Dropout Regulators (Continued)

Products	Output Type	Output Voltage Typ (V)	Adj. Output Voltage		Output Current (A)	Dropout Voltage (V)	Package	Input Voltage Max	Lead Free
			Min (V)	Max (V)					
FAN2512	Single	ADJ 2.5 2.6 2.7 2.8 2.85 3 3.3	1.32	7	0.15	0.15	SOT-23	6.5	No
FAN2513	Single	2.5 2.6 2.7 2.8 2.85 3 3.3	–	–	0.15	0.15	SOT-23	6.5	No
FAN2514	Single	ADJ 2.5 2.6 2.7 2.8 2.85 3 3.3	1.32	7	0.2	0.2	SOT-23	7	No
FAN2515	Single	2.5 2.6 2.7 2.8 2.85 3 3.3	–	–	0.2	0.2	SOT-23	7	No
FAN2518	Single	ADJ 2.5 2.6 2.7 2.8 2.85 3 3.3	1.32	7	0.05	0.05	SOT-23	7	No
FAN2519	Single	2.5 2.6 2.7 2.8 2.85 3 3.3	–	–	0.05	0.05	SOT-23	7	No

Linear Regulators – Low Dropout Regulators (Continued)

Products	Output Type	Output Voltage Typ (V)	Adj. Output Voltage		Output Current (A)	Dropout Voltage (V)	Package	Input Voltage Max	Lead Free
			Min (V)	Max (V)					
FAN2558	Single	ADJ	1	3.3	0.18	0.25	MLP SOT-23	5.5	No
		1							
		1.2							
		1.3							
		1.5							
		1.8							
		2.5							
		3.3							
		3.5							
		3.6							
3.8									
FAN2559	Single	ADJ	1	3.3	0.18	0.25	MLP	5.5	No
		1							
		1.2							
		1.3							
		1.5							
		1.8							
ILC7010	Single	2.5	–	–	0.08	0.08	SC70	8	No
		2.6							
		2.7							
		2.8							
		2.85							
		3							
		3.1							
		3.3							
ILC7011	Single	2.5	–	–	0.08	0.08	SC70	8	No
		2.6							
		2.7							
		2.8							
		2.9							
		3							
		3.1							
		3.3							
ILC7071	Single	2.5	–	–	0.1	0.1	SOT-23	8	No
		2.6							
		2.7							
		2.8							
		2.85							
		2.9							
		3							
		3.1							

Linear Regulators – Low Dropout Regulators (Continued)

Products	Output Type	Output Voltage Typ (V)	Adj. Output Voltage		Output Current (A)	Dropout Voltage (V)	Package	Input Voltage Max	Lead Free
			Min (V)	Max (V)					
ILC7080	Single	2.6	–	–	0.08	0.08	SOT-23	8	No
		2.7							
		2.8							
		2.85							
		2.9							
		3							
		3.1							
		3.3							
ILC7081	Single	ADJ	–	–	0.1	0.1	SOT-23	10	No
		2.5							
		2.6							
		2.7							
		2.8							
		2.85							
		3							
		3.1							
		3.2							
		3.3							
		3.6							
		4.5							
4.7									
5									
ILC7082	Single	ADJ	–	–	0.15	0.15	SOT-23	10	No
		2.5							
		2.6							
		2.7							
		2.8							
		2.85							
		3							
		3.1							
		3.2							
		3.3							
		3.6							
		4.5							
4.7									
5									
ILC7083	Single	Adj	2.5	12	0.15	0.15	SOIC SOT-23	13	No
		2.5							
		2.7							
		2.85							
		3							
		3.3							
		3.6							
		5							
ILC7084	Single	Adj	2.5	12	0.15	0.15	SOT-23	13	No

Linear Regulators – Low Dropout Regulators (Continued)

Products	Output Type	Output Voltage Typ (V)	Adj. Output Voltage		Output Current (A)	Dropout Voltage (V)	Package	Input Voltage Max	Lead Free
			Min (V)	Max (V)					
ILC7280	Dual	2.5 / 3.0 2.8 / 2.8 2.8 / 3.0 3.0 / 3.0 2.85 / 2.85 3.3 / 3.3	–	–	0.15	0.15	MSOP	10	No
KA278R05	Single	5	–	–	2	0.5	TO-220F	35	No
KA278R05C	Single	5	–	–	2	0.5	TO-220F	35	No
KA278R09C	Single	9	–	–	2	0.5	TO-220F	35	No
KA278R12C	Single	12	–	–	2	0.5	TO-220F	35	No
KA278R33C	Single	3.3	–	–	2	0.5	TO-220F	35	No
KA278R51C	Single	5.1	–	–	2	0.5	TO-220F	35	No
KA278RA05	Single	Adj.	1.25	30	2	0.5	TO-220F	35	No
KA278RA05C	Single	Adj.	1.25	30	2	0.5	TO-220F	35	No
KA378R05	Single	5	–	–	3	0.5	TO-220F	35	No
KA378R12	Single	12	–	–	3	0.5	TO-220F	35	No
KA378R33	Single	3.3	–	–	3	0.5	TO-220F	35	No
KA76L05	Single	5	–	–	0.1	0.6	TO-92	33	No
KA78R05C	Single	5	–	–	1	0.5	TO-220F	35	No
KA78R08C	Single	8	–	–	1	0.5	TO-220F	35	No
KA78R09C	Single	9	–	–	1	0.5	TO-220F	35	No
KA78R12C	Single	12	–	–	1	0.5	TO-220F	35	No
KA78R15	Single	15	–	–	1	0.5	TO-220F	35	No
KA78R15C	Single	15	–	–	1	0.5	TO-220F	35	No
KA78R33	Single	3.3	–	–	1	0.5	TO-220F	35	No
KA78R33C	Single	3.3	–	–	1	0.5	TO-220F	35	No
KA78RH33	Single	3.3	–	–	0.8	1.4	TO-252(DPAK)	15	Yes
KA78RLOOD	Single	ADJ	1.26	28	0.1	0.6	SOIC	30	No
KA78RM33	Single	3.3	–	–	0.5	0.6	TO-220 TO-252(DPAK)	20	Yes
LM2931A	Single	5	–	–	0.1	0.6	TO-92	33	No
LP2951	Single	ADJ	1.26	28	0.1	0.6	SOIC	30	No

Linear Regulators – Standard Regulators

Products	Number of Outputs	Output Level	Output Voltage		Input Voltage Max (V)	Output Current Typ (A)	Voltage Drop Max (V)
			Typ (V)	Tolerance (±) (%)			
KA317	1	Positive	ADJ	–	40	1.5	3
KA317AHV	3	Positive	ADJ	–	60	1.5	3
KA317L	1	Positive	ADJ	–	40	0.1	3
KA317M	1	Positive	ADJ	–	40	0.5	3
KA337	1	Negative	ADJ	–	40	1.5	3
KA350	1	Positive	ADJ	–	35	3	3
KA723	1	Positive	ADJ	–	40	0.15	38
KA7630	3	Positive	5.1 8 12	2	20	0.5	2.5
KA7631	3	Positive	5.1 8 12	2	20	0.5	2.5
KA7632	3	Positive	3.3 8 5.1	2	20	0.5	2.5
KA7805	1	Positive	5	4	35	1	2
KA7805A	1	Positive	5	2	35	1	2
KA7805AE	1	Positive	5	2	35	1	2
KA7805E	1	Positive	5	4	35	1	2
KA7806	1	Positive	6	4	35	1	2
KA7806A	1	Positive	6	2	35	1	2
KA7806AE	1	Positive	6	2	35	1	2
KA7806E	1	Positive	6	4	35	1	2
KA7808	1	Positive	8	4	35	1	2
KA7808A	1	Positive	8	2	35	1	2
KA7808AE	1	Positive	8	2	35	1	2
KA7808E	1	Positive	8	4	35	1	2
KA7809	1	Positive	9	4	35	1	2
KA7809A	1	Positive	9	2	35	1	2
KA7809AE	1	Positive	9	2	35	1	2
KA7809E	1	Positive	9	4	35	1	2
KA7810	1	Positive	10	4	35	1	2
KA7810A	1	Positive	10	2	35	1	2
KA7810AE	1	Positive	10	2	35	1	2

Linear Regulators – Standard Regulators (Continued)

Products	Number of Outputs	Output Level	Output Voltage		Input Voltage Max (V)	Output Current Typ (A)	Voltage Drop Max (V)
			Typ (V)	Tolerance (±) (%)			
KA7810E	1	Positive	10	4	35	1	2
KA7812	1	Positive	12	4	35	1	2
KA7812A	1	Positive	12	2	35	1	2
KA7812AE	1	Positive	12	2	35	1	2
KA7812E	1	Positive	12	4	35	1	2
KA7815	1	Positive	15	4	35	1	2
KA7815A	1	Positive	15	2	35	1	2
KA7815AE	1	Positive	15	2	35	1	2
KA7815E	1	Positive	15	4	35	1	2
KA7818	1	Positive	18	4	35	1	2
KA7818A	1	Positive	18	2	35	1	2
KA7818AE	1	Positive	18	2	35	1	2
KA7818E	1	Positive	18	4	35	1	2
KA7824	1	Positive	24	4	40	1	2
KA7824A	1	Positive	24	2	40	1	2
KA7824AE	1	Positive	24	2	40	1	2
KA7824E	1	Positive	24	4	40	1	2
KA78L05A	1	Positive	5	5	30	0.1	1.7
KA78L06A	1	Positive	6	5	30	0.1	1.7
KA78L08A	1	Positive	8	5	30	0.1	1.7
KA78L09A	1	Positive	9	5	30	0.1	1.7
KA78L10A	1	Positive	10	5	30	0.1	1.7
KA78L12A	1	Positive	12	5	35	0.1	1.7
KA78L15A	1	Positive	15	5	35	0.1	1.7
KA78L18A	1	Positive	18	5	35	0.1	1.7
KA78L24A	1	Positive	24	5	40	0.1	1.7
KA78M05	1	Positive	5	–	35	0.5	2
KA78M06	1	Positive	6	–	35	0.5	2
KA78M08	1	Positive	8	–	35	0.5	2
KA78M12	1	Positive	12	–	35	0.5	2
KA78M15	1	Positive	15	–	35	0.5	2
KA78M18	1	Positive	18	–	35	0.5	2
KA78M24	1	Positive	24	–	40	0.5	2
KA78T05	1	Positive	5	4	35	3	2.2

Linear Regulators – Standard Regulators (Continued)

Products	Number of Outputs	Output Level	Output Voltage		Input Voltage Max (V)	Output Current Typ (A)	Voltage Drop Max (V)
			Typ (V)	Tolerance (±) (%)			
KA78T12	1	Positive	12	4	35	3	2.2
KA78T15	1	Positive	15	4	40	3	2.2
KA7905	1	Negative	5	4	35	1	2
KA7905A	1	Negative	5	2	35	1	2
KA7906	1	Negative	6	4	35	1	2
KA7908	1	Negative	8	4	35	1	2
KA7909	1	Negative	9	4	35	1	2
KA7910	1	Negative	10	4	35	1	2
KA7912	1	Negative	12	4	35	1	2
KA7912A	1	Negative	12	2	35	1	2
KA7915	1	Negative	15	4	35	1	2
KA7915A	1	Negative	15	2	35	1	2
KA7918	1	Negative	18	4	35	1	2
KA7924	1	Negative	24	4	35	1	2
KA79L05A	1	Negative	5	5	30	0.1	1.7
KA79L08A	1	Negative	8	5	30	0.1	1.7
KA79L12A	1	Negative	12	5	35	0.1	1.7
KA79L15A	1	Negative	15	5	35	0.1	1.7
KA79L24A	1	Negative	24	5	40	0.1	1.7
KA79M05	1	Negative	5	–	35	0.5	2
KA79M06	1	Negative	6	–	35	0.5	2
KA79M08	1	Negative	8	–	35	0.5	2
KA79M12	1	Negative	12	–	35	0.5	2
KA79M15	1	Negative	15	–	35	0.5	2
KA79M24	1	Negative	24	–	40	0.5	2
LM317	1	Positive	ADJ	–	40	1.5	3
LM317AHV	3	Positive	ADJ	–	60	1.5	3
LM317L	1	Positive	ADJ	–	40	0.1	3
LM317M	1	Positive	ADJ	–	40	0.5	3
LM337	1	Negative	ADJ	–	40	1.5	3
LM350	1	Positive	ADJ	–	35	3	3
LM7805	1	Positive	5	4	35	1	2
LM7805E	1	Positive	5	4	35	1	2
LM78L05A	1	Positive	5	5	30	0.1	1.7

Linear Regulators – Standard Regulators (Continued)

Products	Number of Outputs	Output Level	Output Voltage		Input Voltage Max (V)	Output Current Typ (A)	Voltage Drop Max (V)
			Typ (V)	Tolerance (±) (%)			
LM78L12A	1	Positive	12	5	35	0.1	1.7
LM78M05	1	Positive	5	–	35	0.5	2
LM7905	1	Negative	5	4	35	1	2
LM79L05A	1	Negative	5	5	30	0.1	1.7
MC7805	1	Positive	5	4	35	1	2
MC7805A	–	–	–	–	–	–	–
MC7805AE	1	Positive	5	4	35	1	2
MC7805E	1	Positive	5	4	35	1	2
MC7806	1	Positive	6	4	35	1	2
MC7806A	–	–	–	–	–	–	–
MC7806AE	1	Positive	6	4	35	1	2
MC7806E	1	Positive	6	4	35	1	2
MC7808	1	Positive	8	4	35	1	2
MC7808A	–	–	–	–	–	–	–
MC7808AE	1	Positive	8	4	35	1	2
MC7808E	1	Positive	8	4	35	1	2
MC7809	1	Positive	9	4	35	1	2
MC7809A	–	–	–	–	–	–	–
MC7809AE	1	Positive	9	4	35	1	2
MC7809E	1	Positive	9	4	35	1	2
MC7810	1	Positive	10	4	35	1	2
MC7810A	–	–	–	–	–	–	–
MC7810AE	1	Positive	10	4	35	1	2
MC7810E	1	Positive	10	4	35	1	2
MC7812	1	Positive	12	4	35	1	2
MC7812A	–	–	–	–	–	–	–
MC7812AE	1	Positive	12	4	35	1	2
MC7812E	1	Positive	12	4	35	1	2
MC7815	1	Positive	15	4	35	1	2
MC7815A	–	–	–	–	–	–	–
MC7815AE	1	Positive	15	4	35	1	2
MC7815E	1	Positive	15	4	35	1	2
MC7818	1	Positive	18	4	35	1	2
MC7818A	–	–	–	–	–	–	–

Linear Regulators – Standard Regulators (Continued)

Products	Number of Outputs	Output Level	Output Voltage		Input Voltage Max (V)	Output Current Typ (A)	Voltage Drop Max (V)
			Typ (V)	Tolerance (±) (%)			
MC7818AE	1	Positive	18	4	35	1	2
MC7818E	1	Positive	18	4	35	1	2
MC7824	1	Positive	24	4	40	1	2
MC7824A	–	–	–	–	–	–	–
MC7824AE	1	Positive	24	4	40	1	2
MC7824E	1	Positive	24	4	40	1	2
MC78L05A	1	Positive	5	5	30	0.1	1.7
MC78L05AB	1	Positive	5	–	30	0.1	1.7
MC78L08A	1	Positive	8	5	30	0.1	–
MC78L12A	1	Positive	12	5	35	0.1	–
MC78L15A	1	Positive	15	5	35	0.1	–
MC78L18A	1	Positive	18	5	35	0.1	–
MC78L24A	1	Positive	24	5	40	0.1	–
MC78M05	1	Positive	5	–	35	0.5	2
MC78M06	1	Positive	6	–	35	0.5	2
MC78M08	1	Positive	8	–	35	0.5	2
MC78M12	1	Positive	12	–	35	0.5	2
MC78M15	1	Positive	15	–	35	0.5	2
MC78M18	1	Positive	18	–	35	0.5	2
MC78M24	1	Positive	24	–	40	0.5	2
MC78T05	1	Positive	5	4	35	3	2.2
MC78T12	1	Positive	12	4	35	3	2.2
MC78T15	1	Positive	15	4	40	3	2.2
MC7905	1	Negative	5	4	35	1	2
MC7905A	–	–	–	–	–	–	–
MC7906	1	Negative	6	4	35	1	2
MC7908	1	Negative	8	4	35	1	2
MC7912	1	Negative	12	4	35	1	2
MC7915	1	Negative	15	4	35	1	2
MC7915A	–	–	–	–	–	–	–
MC7918	1	Negative	18	4	35	1	2
MC7924	1	Negative	24	4	35	1	2
MC79L05A	1	Negative	5	5	30	1	1.7
MC79L08A	1	Negative	8	5	30	1	1.7

Linear Regulators – Standard Regulators (Continued)

Products	Number of Outputs	Output Level	Output Voltage		Input Voltage Max (V)	Output Current Typ (A)	Voltage Drop Max (V)
			Typ (V)	Tolerance (±) (%)			
MC79L12A	1	Negative	12	5	35	1	1.7
MC79L15A	1	Negative	15	5	35	1	1.7
MC79L18A	1	Negative	18	5	35	1	1.7
MC79L24A	1	Negative	24	5	40	1	1.7
MC79M05	1	Negative	-5	4	-35	0.5	2
MC79M12	1	Negative	-12	4	-35	0.5	2

AC/DC Conversion ICs: Offline ICs Fairchild Power Switch (FPS™)

Products	Drain Voltage Max (V)	Static Drain-Source on Resistance Max (Ω)	Peak Current Limit (A)	Input Power Max		Switching Frequency	Protections				Package
				@85–265Vac (W)	@230Vac (W)		Over Current	Over Load	Over Voltage	Thermal Shutdown	
FS6M12653RTC	650	0.9	3.2	80	95	70kHz	Auto Restart	Auto Restart	Auto Restart	Latch	TO-220F
FS6S1265RE	650	0.9	8	160	190	Synchronization	Auto Restart	Auto Restart	Auto Restart	Auto Restart	TO-3P
FS6S1565RB	650	0.65	9.7	200	240	Synchronization	Auto Restart	Auto Restart	Auto Restart	Auto Restart	TO-3P
FS6X1220R	200	0.3	3.2	–	–	300kHz	No	Auto Restart	Auto Restart	Auto Restart	TO-220F
FS7M0680	800	2	4	80	100	67kHz	Latch	Latch	Latch	Latch	TO-3P
FS7M0880	800	1.5	5	110	130	67kHz	Latch	Latch	Latch	Latch	TO-3P
FS8S0765RCB	650	1.6	4	80	100	Synchronization	Auto Restart	Auto Restart	Auto Restart	Auto Restart	TO-220
FS8S0965RCB	650	1.2	6	120	145	Synchronization	Auto Restart	Auto Restart	Auto Restart	Auto Restart	TO-220
FSCQ0765RT	650	1.6	5	100	130	QRC	Latch	Auto Restart	Auto Restart	Latch	TO-220F
FSCQ1265RT	650	0.9	7	170	200	QRC	Latch	Auto Restart	Auto Restart	Latch	TO-220F
FSCQ1565RT	650	0.65	8	200	230	QRC	Latch	Auto Restart	Auto Restart	Latch	TO-220F
FSD1000	700	9	–	15	17	67kHz	No	Auto Restart	Latch	Auto Restart	–
FSD200	700	32	0.3	6	9	134kHz	No	Auto Restart	No	Auto Restart	DIP
FSD210	700	32	0.3	6	9	134kHz	No	Auto Restart	No	Auto Restart	DIP
FSDH0265RN	650	6	1.5	20	23	100kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	DIP SOP
FSDH321	650	19	0.7	12	17	100kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	DIP
FSDL0165RN	650	10	1.2	15	17	50kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	DIP SOP
FSDL0365RN	650	4.5	2.2	30	35	50kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	SOP
FSDL0365RNB	650	4.5	2.2	30	35	50kHz	No	Auto Restart	Auto Restart	Auto Restart	DIP
FSDL321	650	19	0.7	12	17	50kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	DIP
FSDM0265RN	650	6	1.5	20	23	67kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	SOP
FSDM0265RNB	650	6	1.5	20	23	67kHz	No	Auto Restart	Auto Restart	Auto Restart	DIP
FSDM0365RN	650	4.5	2.2	30	35	67kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	SOP
FSDM0365RNB	650	4.5	2.2	30	35	67kHz	No	Auto Restart	Auto Restart	Auto Restart	DIP
FSDM0565RB	650	2.2	2.3	60	70	67kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	TO-220F
FSDM07652RB	650	1.6	2.5	75	85	67kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	TO-220F
FSDM311	650	19	0.55	7	10	67kHz	No	Auto Restart	Auto Restart	Auto Restart	DIP SOP
KA5H0280R	800	7	1.2	25	30	100kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	TO-220F
KA5H0365R	650	4.5	2.2	40	50	100kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	TO-220F
KA5H0380R	800	5	2.2	40	50	100kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	TO-220F
KA5L0365R	650	4.5	2.2	40	50	50kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	TO-220F

AC/DC Conversion ICs: Offline ICs Fairchild Power Switch (FPS™) (Continued)

Products	Drain Voltage Max (V)	Static Drain-Source on Resistance Max (Ω)	Peak Current Limit (A)	Input Power Max		Switching Frequency	Protections				Package
				@85–265Vac (W)	@230Vac (W)		Over Current	Over Load	Over Voltage	Thermal Shutdown	
KA5L0380R	800	5	2.2	40	50	50kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	TO-220F
KA5M0280R	800	7	1.2	25	30	67kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	TO-220F
KA5M0365R	650	4.5	2.2	40	50	67kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	TO-220F
KA5M0380R	800	5	2.2	40	50	67kHz	Auto Restart	Auto Restart	Auto Restart	Auto Restart	TO-220F
KA5M0965Q	650	1.2	6	120	145	67kHz	Latch	Latch	Latch	Latch	TO-3P
KA5Q0565RT	650	2.2	3.5	70	80	QRC	Latch	Auto Restart	Auto Restart	Latch	TO-220F
KA5Q0740RT	400	1.1	5	100	–	QRC	Latch	Auto Restart	Auto Restart	Latch	TO-220F
KA5Q1565RF	650	0.65	11.5	270	300	QRC	Latch	Auto Restart	Auto Restart	Latch	TO-3PF

AC/DC Conversion ICs: Power Factor Correction (PFC)

Products	Type	Package	PFC Control	Startup Current (µA)	Operating Current (mA)	Drive Out (A)	F _{PWM} / F _{PFC}	PWM Duty Cycle Max (%)	UVLO	Options						Special Features
										Soft Start	Current Limit	Feed Fwd	Brownout	Soft Switching	Push-Pull	
FAN4803-1	PWM + PFC	DIP SOIC	Input Current Shaping	200	2	1	1	50	13/10	Yes	Yes	–	Yes	–	–	–
FAN4803-2	PWM + PFC	DIP SOIC	Input Current Shaping	200	2	1	2	50	13/10	Yes	Yes	–	Yes	–	–	–
FAN4810	PFC	DIP SOIC	Average Current	200	5.5	1	1	49	13/10	Yes	Yes	Yes	Yes	–	–	–
FAN4822	PFC	DIP SOIC-Wide	Average Current	700	22	0.5	–	–	13/10	Yes	Yes	Yes	Yes	Yes	–	Soft Switching (ZVS)
FAN7527B	PFC	DIP SOIC	Discontinuous (Transition)	60	3	0.5	–	–	12/9	–	Yes	–	–	–	–	–
ML4800	PWM + PFC	DIP SOIC	Average Current	200	5.5	1	1	49	13/10	Yes	Yes	Yes	Yes	–	–	–
ML4812	PFC	DIP PLCC	Peak Current	800	20	1	–	–	16/10	–	Yes	Yes	–	–	–	–
ML4821	PFC	DIP SOIC-Wide	Average Current	600	26	1	–	–	15/10	Yes	Yes	Yes	Yes	–	–	–
ML4824-1	PWM + PFC	DIP SOIC-Wide	Average Current	700	16	0.5	1	49	13/10	Yes	Yes	Yes	Yes	–	–	–
ML4824-2	PWM + PFC	DIP SOIC-Wide	Average Current	700	16	0.5	2	49	13/10	Yes	Yes	Yes	Yes	–	–	–
ML4826-2	PWM + PFC	DIP	Average Current	700	22	0.5	2	50	13/10	Yes	Yes	Yes	Yes	–	Yes	Push-Pull
ML4841	PWM + PFC	DIP	Average Current	700	17	0.5	2	50	13/10	Yes	Yes	Yes	Yes	–	–	–

DC/DC Conversion ICs: Charge Pump Regulators

Products	Package
FAN5601	MLP

DC/DC Conversion ICs: DC/DC Converter (Integrated Switch)

Products	Output Current (A)	Power Input		Application	Type	Modulation	Light Load PFM Mode	PWM Outputs (V)	PWM V _{OUT}		HS-Output RDS (V _{ON}) (mΩ)	LS-Output RDS (V _{ON}) (mΩ)	Frequency Range (KHz)	Output Accuracy (±% V _{out})	Efficiency (%)	Package	Pin count
		Min (V)	Max (V)						Min (V)	Max (V)							
FAN4855	0.5	1.5	2.7	2 cell input	Sync. Boost	PFM	Y	ADJ	3	5	275	275	100–600	5	95	MSOP TSSOP	8
FAN5307	0.3	2.5	5.5	low voltage	Sync. Buck	PFM/PWM	Y	Fixed/Adj	0.7	V _{in}	500	400	800–1200	3	95	SOT-23	–
FAN5660	0.1	1.5	5.5	doubler/inv.	Charge Pump	N/A	N/A	NA	–	N/A	100	100	5/100	–	90	SOIC	8
FAN6555	2	2	4	DDR VTT	Sync. Buck	PWM	–	ADJ	0.25	V _{IN}	100	100	600	1	90	SOIC	16
ILC6363	0.5	2.7	4.2	1 Li-Ion cell	Sync. Boost	PFM/PWM	User sel.	Fixed/Adj	2.5	6	700	400	255–345	4	90	MSOP	8
ILC6383	0.35	2.7	4.2	2 cell input	Sync. Boost	PFM/PWM	User sel.	Fixed/Adj	2.5	6	700	400	255–345	4	90	MSOP	8
ML6554	3	2	4	DDR VTT	Sync. Buck	PWM	–	ADJ	0.25	V _{IN}	100	100	600	1	90	–	–

DC/DC Conversion ICs: PWM Controller

Products	Type	Application	Power Input		PWM Outputs (V)	Phases	Output Programming	Number of Linear Outputs	Linear Outputs (V)	Frequency Range (KHz)	Packages	Gate Drive Impedance (HS/LS) (Ω)	Gate Drive Swing (HS/LS) (V)	Number of PWM Outputs		Min PWM V _{OUT} (V)	Max PWM V _{OUT} (V)	Operating Current (mA)	Output Accuracy (±% V _{OUT})	Active Droop	Usages	Shut-Down Current (µA)	Operating Temp.	
			Min (V)	Max (V)																			Min (°C)	Max (°C)
FAN5009	Sync. Buck	Desktop CPU	10	13.5	N/A	1	N/A	–	–	500	SOIC-8	1.4/1.4	12-Dec	1	–	–	3.5	1	N/A	Desktop PC CPU (VRM9/10/10.1)	–	0	85	
FAN5019	Sync. Buck	Desktop CPU	10.2	13.8	ADJ	–	DAC	–	–	100 to 1000	TSSOP	N/A	N/A	1	0.838	1.6	5	1	Yes	Desktop PC CPU (VRM9.0, VRM10.0, VRM10.1, VRM10.2); 2 to 4 Phase	–	0	85	
FAN5026	Sync. Buck	Notebook System/DDR	3	24	ADJ, ADJ	1	Resistor	–	–	300	TSSOP-28	2.5/2.5	5-May	2	0.9	15	3	1	No	DDR Power for VDDQ, V _{tt}	30	–40	85	
FAN5037	Buck	Desktop System	4.5	5.5	ADJ	1	Resistor	–	–	–	SOIC-8	–	12	1	1.2	3.6	25	3	No	Desktop PC Logic/V _{tt}	–	0	70	
FAN5038	Buck	Desktop System	4.5	5.5	ADJ	1	Resistor	1	–	–	SOIC-16	–	12	1	1.5	3.6	25	3	No	Dual Voltage Controller for DSP/ASIC/FPGA Supplies	–	0	70	
FAN5059	Sync. Buck	Desktop CPU	4.5	5.5	ADJ	1	DAC	3	–	310	SOIC-Wide-24	–	12-Dec	1	1.3	3.5	–	1	Yes	Desktop PC CPU (VRM8.4) + Logic; Enhanced Power Good	–	0	70	
FAN5066	Sync. Buck	Desktop System	4.5	5.5	ADJ	1	Resistor	–	–	80 to 1000	SOIC-Wide-20 TSSOP-20	–	5-Dec	1	0.4	3.5	–	1	No	Ultra-Low Voltage Desktop PC Logic, V _{tt}	–	0	70	
FAN5068	Sync. Buck	Desktop System	4.5	5.5	ADJ	1	Resistor	3	–	300	–	1.8/1.8	1.8/1.2	1	0.7	4	15	1	N/A	DDR Memory Controller	–	-10	85	
FAN5090	Sync. Buck	Desktop CPU	10.8	13.2	ADJ	2	DAC	–	–	100 to 300	TSSOP-24	5/1.5, 5/1.5	12-Aug	1	1.1	1.85	15	1	Yes	Desktop PC CPU (VRM9.0); Two Phase	–	0	70	
FAN5091	Sync. Buck	Desktop CPU	4.5	5.5	ADJ	2	DAC	–	–	100 to 1000	TSSOP-24	1-Jan	5-May	1	1.1	1.85	15	1	Yes	Desktop PC CPU (VRM9.0); Two Phase	–	0	70	
FAN5092	Sync. Buck	Desktop System	10.8	13.2	ADJ	–	DAC/Resistor	–	–	100 to 1000	TSSOP	1-Jan	12-May	1	1.1	5	20	1	Yes	Synchronous Multi-phase DC DC Controller IC	–	0	70	
FAN5093	Sync. Buck	Desktop CPU	10.8	13.2	ADJ	2	DAC	–	–	100 to 1000	TSSOP-24	1-Jan	12-Aug	1	1.1	1.85	15	1	Yes	Desktop PC CPU (VRM9.0); Two Phase	–	0	70	
FAN5094	Sync. Buck	Desktop System	10.8	13.2	ADJ	–	DAC	–	–	100 to 1000	TSSOP	1-Jan	12-May	1	1.1	1.85	20	1	Yes	–	–	0	70	
FAN5098	Sync. Buck	Desktop CPU	10.8	13.2	ADJ	2	DAC	–	–	100 to 1000	TSSOP-24	1-Jan	12-Aug	1	0.8	1.55	26	2	Yes	–	–	–	–	
FAN5193	Sync. Buck	Desktop CPU	4.5	5.5	ADJ	2	DAC	–	–	100 to 1000	TSSOP-24	1-Jan	5-May	1	1.1	1.85	20	1	Yes	–	–	0	70	
FAN5230	Sync. Buck	Notebook System	5.4	24	5,3,3,12	1	Resistor	2	–	300	QSOP-24	5-Jul	5-May	3	–	–	3	1	No	Notebook PC Logic/System	5	-20	85	
FAN5232	Sync. Buck	Notebook ILC D PC	5.6	24	12	1	Resistor	2	–	300	TSSOP-14	5-Jul	5-May	1	–	–	1.4	1	No	Notebook PC Storage and Standby	5	-20	85	

DC/DC Conversion ICs: PWM Controller (Continued)

Products	Type	Application	Power Input		PWM Outputs (V)	Phases	Output Programming	Number of Linear Outputs	Linear Outputs (V)	Frequency Range (KHz)	Packages	Gate Drive Impedance (HS/LS) (Ω)	Gate Drive Swing (HS/LS) (V)	Number of PWM Outputs	Min PWM V_{OUT} (V)	Max PWM V_{OUT} (V)	Operating Current (mA)	Output Accuracy ($\pm\%$ V_{OUT})	Active Droop	Usages	Shut-Down Current (μ A)			Operating Temp.	
			Min (V)	Max (V)																	Min ($^{\circ}$ C)	Max ($^{\circ}$ C)			
FAN5233	Sync. Buck	Notebook System	5.4	24	5,3,3,12	1	Resistor	1	-	300	TSSOP-24	5-Jul	5-May	3	-	-	3	1	No	Notebook PC Battery Powered Applications	5	-20	85		
FAN5234	Sync. Buck	Notebook System	3	24	ADJ	1	Resistor	-	-	300/600	QSOP-16 TSSOP-16	2.5/2.5	5-May	1	0.9	15	1.3	1	No	Notebook Low-Voltage CPU and Vtt	30	-10	85		
FAN5235	Sync. Buck	Notebook System	5.4	24	5,3,3,12	1	Resistor	2	-	300	QSOP-24 TSSOP-24	5-Jul	5-May	3	-	-	3	1	No	LCD PC Logic/System	5	-20	85		
FAN5236	Sync. Buck	Notebook System/DDR	3	24	ADJ ADJ-D	1	Resistor	-	-	300	QSOP-28 TSSOP-28	2.5/2.5	5-May	2	0.9	15	3	1	No	DDR Power for VDDQ, Vtt	30	-40	85		
FAN5240	Sync. Buck	Notebook CPU	3	24	ADJ	2	DAC	-	-	300	QSOP-28 TSSOP-28	2.5/1.2	5-May	1	0.925	2	2	1	Yes	Notebook PC CPU for Mobile Athlon and Duron	30	-10	85		
FAN5242	-	-	-	-	-	-	-	-	-	-	QSOP-24 TSSOP-24	-	-	-	-	-	-	-	-	-	-	-	-		
FAN5250	Sync. Buck	Notebook CPU	3	24	ADJ	1	DAC	-	-	300/600	QSOP-24	3/1.6	6-May	1	0.6	1.75	3.2	1	Yes	Portable PC CPU for Transmeta	30	-10	85		
FAN53168	Sync. Buck	Desktop CPU	10.8	13.2	ADJ	-	DAC	-	-	100 to 1000	TSSOP	N/A	N/A	1	0.838	1.6	5	1	Yes	Desktop PC CPU (VRM10); 2 to 4 Phase	-	0	85		
FAN53180	Sync. Buck	Desktop CPU	10.8	13.2	ADJ	-	DAC	-	-	100 to 1000	TSSOP	N/A	N/A	1	0.838	1.6	5	1	Yes	Desktop PC CPU (VRM10); 2 to 4 Phase	-	0	85		
FAN53418	Sync. Buck	Desktop CPU	10.8	13.2	N/A	1	N/A	-	-	100 to 1000	SOIC-8 TSSOP-8	1-Jan	12-Dec	1	-	-	3	1	N/A	Desktop PC CPU (VRM9/10)	-	0	85		
RC5037	-	-	-	-	-	-	-	-	-	-	SOIC-8-J	-	-	-	-	-	-	-	-	Desktop PC Logic/Vtt	-	-	-		
RC5057	-	-	-	-	-	-	-	-	-	-	SOIC-16	-	-	-	-	-	-	-	-	Desktop PC CPU (VRM8.4)	-	-	-		

ANALOG & MIXED SIGNAL

DC/DC Conversion ICs: Special Functions (ACPI)

Products	Package	Pin Count
FAN5063	SOIC	16
FAN5067	SOIC	16

PWM and Phase Modulation Controllers (AC/DC and DC/DC)

Products	Number of Outputs	Control Mode	Switching Frequency (kHz)	Supply Voltage Max (V)	Output Current Max (A)	Duty Ratio (%)	Startup Current (µA)	Package
FAN7554	1	Current	500	30	1	98	200	DIP SOIC
FAN7556	1	Voltage	500	30	1	74	200	DIP SOIC
FAN7601	1	Current	300	20	0.25	98	1000	DIP SOIC SSOP
KA34063	1	Voltage	100	40	1.5	100	260	DIP SOIC
KA3524	–	Voltage	350	40	0.1	–	8000	DIP
KA3525A	2	Voltage	–	40	0.5	–	8000	DIP
KA3842A	1	Current	500	30	1	100	200	DIP SOIC
KA3842B	1	Current	500	30	1	100	450	DIP SOP
KA3843A	1	Current	500	30	1	100	200	DIP SOIC
KA3843B	1	Current	500	30	1	100	450	DIP SOP
KA3844B	1	Current	500	30	1	50	450	DIP SOP
KA3845	1	Current	500	30	1	50	450	DIP SOP
KA3846	2	Current	500	40	0.5	100	200	DIP
KA3882E	1	Current	500	30	1	100	200	DIP SOIC
KA7500C	2	Voltage	300	42	0.25	–	1000	DIP SOP
KA7552A	1	Voltage	600	30	1.5	74	150	DIP
KA7553A	1	Voltage	600	30	1.5	49	150	DIP
KA7577	1	Voltage	208	31	0.5	53	150	DIP
MC34063A	1	Voltage	100	40	1.5	100	260	SOIC
ML4823	1	Voltage Current	1000	30	–	80	1100	DIP SOIC

Supervisory Circuits – Microprocessor: General Purpose

Products	Package	V _{CC} (V)	Output Level	Output Mode	Output Driver
FM1233AC	SOT-23	3	Fixed 3V	Active Low	Push/Pull
FM1233AD	SOT-23	3	Fixed 3V	Active Low	Push/Pull
FM1233BD	SOT-23	5	Fixed 5V	Active Low	Push/Pull
FM1233BE	SOT-23	5	Fixed 5V	Active Low	Push/Pull
FM1233BF	SOT-23	5	Fixed 5V	Active Low	Push/Pull
FM1233DD	SOT-23	5	Fixed 5V	Active Low	Push/Pull
FM1233DE	SOT-23	5	Fixed 5V	Active Low	Push/Pull
FM1233DF	SOT-23	5	Fixed 5V	Active Low	Push/Pull
FM1233EC	SOT-23	3	Fixed 3V	Active Low	Push/Pull
FM1233ED	SOT-23	3	Fixed 3V	Active Low	Push/Pull
FM803J	SOT-23	5	Fixed 5V	Active Low	Open-Drain
FM803L	SC70 SOT-23	5	Fixed 5V	Active Low	Open-Drain
FM803M	SOT-23	5	Fixed 5V	Active Low	Open-Drain
FM803R	SC70 SOT-23	3	Fixed 3V	Active Low	Open-Drain
FM803S	SC70 SOT-23	3	Fixed 3V	Active Low	Open-Drain
FM803T	SC70 SOT-23	3	Fixed 3V	Active Low	Open-Drain
FM809J	SOT-23	5	Fixed 5V	Active Low	Push/Pull
FM809L	SC70 SOT-23	5	Fixed 5V	Active Low	Push/Pull
FM809M	SOT-23	5	Fixed 5V	Active Low	Push/Pull
FM809R	SC70 SOT-23	3	Fixed 3V	Active Low	Push/Pull
FM809S	SC70 SOT-23	3	Fixed 3V	Active Low	Push/Pull
FM809T	SC70 SOT-23	3	Fixed 3V	Active Low	Push/Pull
FM810J	SOT-23	5	Fixed 5V	Active High	Push/Pull
FM810L	SC70 SOT-23	5	Fixed 5V	Active High	Push/Pull
FM810M	SOT-23	5	Fixed 5V	Active High	Push/Pull
FM810R	SC70 SOT-23	3	Fixed 3V	Active High	Push/Pull
FM810S	SC70 SOT-23	3	Fixed 3V	Active High	Push/Pull
FM810T	SC70 SOT-23	3	Fixed 3V	Active High	Push/Pull
FM811R	–	5	Fixed 3V	Active Low	Push/Pull
FM811S	–	5	Fixed 3V	Active Low	Push/Pull
FM811T	–	5	Fixed 3V	Active Low	Push/Pull
FM812R	–	5	Fixed 3V	Active High	Push/Pull
FM812S	–	5	Fixed 3V	Active High	Push/Pull
FM812T	–	5	Fixed 3V	Active High	Push/Pull
KA3504	DIP	30	Fixed 5V	Active Low	–

Supervisory Circuits – SMPS

Products	Package	Operating Voltage		PG Inputs	Remote	Protections		
		Min	Max			Over Voltage	Over Current	Under Voltage
FAN7585	DIP	15	30	Det/+5	Yes	Yes	Yes	Yes
FAN7680	DIP SOIC	4	15	7	No	Yes	No	Yes
FAN7687	DIP SOP	4	15	7	No	Yes	No	Yes
KA3501	DIP	5	32	Det/+5	No	Yes	No	No
KA3505	DIP	15	30	Det/+3.3V/+5V	Yes	Yes	Yes	Yes
KA3511	DIP	10	30	Det/+5	Yes	Yes	Yes	Yes

Supervisory Circuits – Voltage Detectors

Products	Detecting Voltage			Hysteresis (mV)	V _{CC}		Output Current Sink (mA)	Package
	Min (V)	Typ (V)	Max(V)		Min (V)	Max (V)		
ILC5061AIC32	3.168	3.2	3.232	160	–	–	50	SC70
ILC5061AM23	2.277	2.3	2.323	115	–	–	50	SOT-23
ILC5061AM25	2.475	2.5	2.525	125	–	–	50	SOT-23
ILC5061AM26	2.574	2.6	2.626	130	–	–	50	SOT-23
ILC5061AM27	2.673	2.7	2.727	135	–	–	50	SOT-23
ILC5061AM28	2.772	2.8	2.828	140	–	–	50	SOT-23
ILC5061AM29	2.871	2.9	2.929	145	–	–	50	SOT-23
ILC5061AM31	3.069	3.1	3.131	155	–	–	50	SOT-23
ILC5061AM32	3.168	3.2	3.232	160	–	–	50	SOT-23
ILC5061AM34	3.366	3.4	3.434	170	–	–	50	SOT-23
ILC5061AM44	4.356	4.4	4.444	220	–	–	50	SOT-23
ILC5061AM46	4.554	4.6	4.646	230	–	–	50	SOT-23
ILC5061M23	2.254	2.3	2.346	115	–	–	50	SOT-23
ILC5061M25	2.45	2.5	2.55	125	–	–	50	SOT-23
ILC5061M26	2.548	2.6	2.652	130	–	–	50	SOT-23
ILC5061M27	2.646	2.7	2.754	135	–	–	50	SOT-23
ILC5061M28	2.744	2.8	2.856	140	–	–	50	SOT-23
ILC5061M29	2.842	2.9	2.958	145	–	–	50	SOT-23
ILC5061M31	3.038	3.1	3.162	155	–	–	50	SOT-23
ILC5061M34	3.332	3.4	3.468	170	–	–	50	SOT-23
ILC5061M44	4.312	4.4	4.488	220	–	–	50	SOT-23
ILC5061M46	4.508	4.6	4.692	230	–	–	50	SOT-23
ILC5062AIC23	2.277	2.3	2.323	155	–	–	50	SC70
ILC5062AIC25	2.475	2.5	2.525	155	–	–	50	SC70
ILC5062AIC26	2.574	2.6	2.626	155	–	–	50	SC70
ILC5062AIC27	2.673	2.7	2.727	155	–	–	50	SC70
ILC5062AIC28	2.772	2.8	2.828	155	–	–	50	SC70
ILC5062AIC29	2.871	2.9	2.929	155	–	–	50	SC70
ILC5062AIC31	3.069	3.1	3.131	155	–	–	50	SC70
ILC5062AIC34	3.366	3.4	3.434	155	–	–	50	SC70
ILC5062AIC44	4.356	4.4	4.444	155	–	–	50	SC70
ILC5062AIC46	4.454	4.6	4.646	155	–	–	50	SC70
ILC5062AM23	2.277	2.3	2.323	155	–	–	50	SOT-23
ILC5062AM25	2.475	2.5	2.525	155	–	–	50	SOT-23

Supervisory Circuits – Voltage Detectors (Continued)

Products	Detecting Voltage			Hysteresis (mV)	V _{CC}		Output Current Sink (mA)	Package
	Min (V)	Typ (V)	Max(V)		Min (V)	Max (V)		
ILC5062AM26	2.574	2.6	2.626	130	–	–	50	SOT-23
ILC5062AM27	2.673	2.7	2.727	135	–	–	50	SOT-23
ILC5062AM28	2.772	2.8	2.828	140	–	–	50	SOT-23
ILC5062AM29	2.871	2.9	2.929	145	–	–	50	SOT-23
ILC5062AM30	2.97	3	3.03	150	–	–	50	SOT-23
ILC5062AM31	3.069	3.1	3.131	155	–	–	50	SOT-23
ILC5062AM34	3.366	3.4	3.434	170	–	–	50	SOT-23
ILC5062AM37	3.663	3.7	3.737	185	–	–	50	SOT-23
ILC5062AM44	4.356	4.4	4.444	220	–	–	50	SOT-23
ILC5062AM46	4.554	4.6	4.646	230	–	–	50	SOT-23
ILC5062M26	2.548	2.6	2.652	130	–	–	50	SOT-23
ILC5062M27	2.646	2.7	2.754	135	–	–	50	SOT-23
KA75250M	2.35	2.5	2.65	50	0.3	15	20	SOT-89
KA75250Z	2.35	2.5	2.65	50	0.3	15	20	TO-92
KA75270M	2.55	2.7	2.85	50	0.3	15	20	SOT-89
KA75270Z	2.55	2.7	2.85	50	0.3	15	20	TO-92
KA75290M	2.75	2.9	3.05	50	0.3	15	20	SOT-89
KA75290Z	2.75	2.9	3.05	50	0.3	15	20	TO-92
KA75310M	2.95	3.1	3.25	50	0.3	15	20	SOT-89
KA75310Z	2.95	3.1	3.25	50	0.3	15	20	TO-92
KA75330M	3.15	3.3	3.45	50	0.3	15	20	SOT-89
KA75330Z	3.15	3.3	3.45	50	0.3	15	20	TO-92
KA75360M	3.45	3.6	3.75	50	0.3	15	20	SOT-89
KA75360Z	3.45	3.6	3.75	50	0.3	15	20	TO-92
KA75390Z	3.75	3.9	4.05	50	0.3	15	20	TO-92
vKA75420M	4.05	4.2	4.35	50	0.3	15	20	SOT-89
KA75420Z	4.05	4.2	4.35	50	0.3	15	20	TO-92
KA75450M	4.35	4.5	4.65	50	0.3	15	20	SOT-89
KA75450Z	4.35	4.5	4.65	50	0.3	15	20	TO-92

Voltage References and Shunts

Products	Preset Output Voltage (V)	Adj. Output Voltage		Tolerance (%)	Max Current (mA)	Package
		Min (V)	Max (V)			
FAN4040	2.5 3.3 5	–	–	0.1 0.2 0.5 1	30	SOT-23
FAN4041CI	Adjustable	1.22	12	0.5	30	SOT-23
FAN4041DI	Adjustable	1.22	12	1	30	SOT-23
FAN4050	2.5 3.3	–	–	–	20	SOT-23
FAN431	2.5 Adjustable	2.5	37	2	100	TO-92
KA431	2.5 Adjustable	2.5	37	2	100	DIP SOIC TO-92
KA431A	2.5 Adjustable	2.5	37	1	100	SOIC TO-92
KA431L	–	2.5	37	0.5	100	SOIC TO-92
KA431S	2.5 Adjustable	2.5	37	2	100	SOT-23F
LM336Bx5	5 Adjustable	4	6	2	15	TO-92
LM336x25	2.5	2.5	37	2	15	TO-92
LM336x5	5 Adjustable	4	6	4	15	TO-92
LM431A	2.5 Adjustable	2.5	37	2	100	DIP SOIC TO-92
LM431B	2.5 Adjustable	2.5	37	1	100	SOIC TO-92
LM431C	2.5 Adjustable	2.5	37	0.5	100	SOIC TO-92
LM431SA	2.5 Adjustable	2.5	37	2	100	SOT-23F SOT-89
LM431SB	2.5 Adjustable	2.5	37	1	100	SOT-23F SOT-89
LM431SC	2.5 Adjustable	2.5	37	0.5	100	SOT-23F SOT-89
RC431A	Adjustable	1.24	12	1.5	20	–
TL431A	2.5 Adjustable	2.5	37	1	100	SOIC TO-92
TL431CP	2.5 Adjustable	2.5	37	2	100	DIP

Landing Correction ICs

Products	Supply Voltage	Operating Temperature		Supply Current	Output Current	Storage Temperature		Input Voltage	Differential Output Voltage
	Max (V)	Min (°C)	Max (°C)	Typ (mA)	Max (mA)	Max (°C)	Min (°C)	Max (V)	Max (V)
FAN7071	13.5	-20	75	3	200	150	-55	5	7.4

Verticle Output ICs

Products	Description
KA2142	Vertical Output IC

Voltage Stabilizers

Products	Description
KA33V	Voltage Stabilizer
KA33VBU	Voltage Stabilizer

Temperature Sensors

Products	Output Slope Sensor Gain (mV/Celsius)	Supply Voltage		Supply Current Max (μ A)	Accuracy (\pm Celsius)	Package
		Min (V)	Max (V)			
FM20	-12	2.4	6	12	3	SC70 SOT-23
FM50	10	2.4	6	130	3	SOT-23
FM75	–	2.7	5.5	150	3	MSOP SOIC

Timers

Products	Type	Supply Voltage		Control Voltage Min at V _{CC}		Control Voltage Max at V _{CC}		Threshold Voltage Min at V _{CC}		Threshold Voltage Typ at V _{CC}		Threshold Voltage Max at V _{CC}		Trigger Voltage Min at V _{CC}		Trigger Voltage Max at V _{CC}	
		Min	Max	15V	5V	15V	5V	15V	5V	15V	15V	5V	15V	5V	15V	5V	
KA555	Single	4.5	16	9	2.6	11	4	–	3.3	10	–	3.3	4.5	1.1	5.6	2.2	
KA556	Dual	4.5	16	9	2.6	11	4	8.8	2.4	–	11.2	4.2	4.5	1.1	5.6	2.2	
KA558	Quad	4.5	16	–	–	–	–	8.8	–	–	–	–	1.5	–	2.4	–	
LM555	Single	4.5	16	9	2.6	11	4	–	3.3	10	–	3.3	4.5	1.1	5.6	2.2	
LM556	Dual	4.5	16	9	2.6	11	4	8.8	2.4	–	11.2	4.2	4.5	1.1	5.6	2.2	
NE555	Single	4.5	16	9	2.6	11	4	–	3.3	10	–	3.3	4.5	1.1	5.6	2.2	
SA555	Quad	4.5	16	9	2.6	11	4	–	3.3	10	–	3.3	4.5	1.1	5.6	2.2	

Analog Filter and Buffers

Products	Format		Channels	Cutoff Frequency (MHz)	Filter Type	HD Capable	SCART Compatible	Sound Notch	Modulator Outputs	Group Delay Compensation	Input Clamps	Sync Strippers
	Input	Output										
FMS6406	Composite YC	Composite YC	2	7.1	5th-order	No	No	Yes	Yes	Yes	Yes	Yes
FMS6407	Composite RGB YC YUV	Composite RGB YC YUV	3	7.1	6th-order	Yes	No	No	No	No	Yes	Yes
FMS6408	Composite RGB YC YUV	Composite RGB YC YUV	3	7.1	6th-order	No	No	No	No	No	No	No
FMS6410	Composite YC	Composite YC	2	7.1	4th-order	No	No	No	No	No	Yes	Yes
FMS6413	Composite	Composite	1	7.1	4th-order	No	No	No	No	No	Yes	Yes
FMS6414	Composite YC	Composite YC	2	7.1	4th-order	No	No	No	No	No	Yes	Yes
FMS6418A	RGB YUV	RGB YUV	3	7.1, 30	6th-order	Yes	No	No	No	No	No	No
FMS6419	Composite RGB YC YUV	Composite RGB YC YUV	6	8, 30	6th-order	Yes	No	No	No	No	No	No
ML6415	Composite YC	Composite YC	2	7.1	4th-order	No	No	Yes	Yes	Yes	Yes	Yes
ML6416	Composite YC	Composite YC	2	7.1	4th-order	No	No	Yes	Yes	Yes	Yes	Yes
ML6426x1	RGB YUV	RGB YUV	3	6.7,6.7,6.7	4th-order	Yes	No	No	No	Yes	Yes	No
ML6426x15	RGB YUV	RGB YUV	3	15,15,15	4th-order	Yes	No	No	No	Yes	Yes	No
ML6426x2	RGB YUV	RGB YUV	3	12,12,12	4th-order	Yes	No	No	No	Yes	Yes	No
ML6426x3	RGB YUV	RGB YUV	3	24,24,24	4th-order	Yes	No	No	No	Yes	Yes	No
ML6426x4	RGB YUV	RGB YUV	3	30,30,30	4th-order	Yes	No	No	No	Yes	Yes	No
ML6426x5	RGB YUV	RGB YUV	3	36,36,36	4th-order	Yes	No	No	No	Yes	Yes	No
ML6427	Composite RGB YC YUV	Composite RGB YC YUV	4	7.1, 7.1, 7.1, 7.1	4th-order	No	Yes	No	No	Yes	Yes	No
ML6428	Composite YC	Composite YC	2	6.7, 6.7	4th-order	No	No	No	No	Yes	Yes	No

Analog Filter and Buffers (Continued)

Products	Format		Channels	Cutoff Frequency (MHz)	Filter Type	HD Capable	SCART Compatible	Sound Notch	Modulator Outputs	Group Delay Compensation	Input Clamps	Sync Strippers
	Input	Output										
ML6429	Composite RGB YC YUV	Composite RGB YC YUV	4	7.1, 7.1, 7.1, 7.1	4th-order	No	Yes	No	No	Yes	Yes	No

ANALOG & MIXED
SIGNAL

Decoders and Genlocks

Products	Analog or Digital Inputs	Format		Digital Resolution		Digital Clock Rate (MHz)	VCR Capable	Number of Lines in Filter	Comb Filter
		Input	Output	Input (bits)	Output (bits)				
TMC2072	Analog	NTSC PAL	NTSC PAL	–	8	12.27 13.5 14.75 15 24.54 27 29.5 30	No	–	–
TMC22071A	Analog	NTSC PAL	NTSC PAL	–	8	12.27 13.5 14.75 15 24.54 27 29.5 30	No	–	–
TMC22153A	Digital	CCIR-601 D1 D2 CVBS YC	CCIR-601 D1 RGB YUV YCBCR	10	10	12.27 13.5 14.32 14.75 15 17.73 27	No	3	Yes

Digital Video Filters and Mixers

Products	Bits		Number of Taps	Frequency	Decimation	Interpolation
	In	Out				
TMC2242A	12	16	55	30	Yes	Yes
TMC2242Ax1	12	16	55	40	Yes	Yes
TMC2242Ax2	12	16	55	60	Yes	Yes
TMC2242B	12	16	55	30	Yes	Yes
TMC2242Bx1	12	16	55	40	Yes	Yes
TMC2242Bx2	12	16	55	60	Yes	Yes
TMC2246A	–	16	4	30	No	Yes
TMC2246Ax1	–	16	4	40	No	Yes
TMC2246Ax2	–	16	4	60	No	Yes
TMC2249A	12	16	32	25	No	No
TMC2249Ax1	12	16	32	40	No	No
TMC2249Ax2	12	16	32	60	No	No
TMC2250A	36	36	9	30	No	No
TMC2250Ax2	36	36	9	40	No	No

Digital Video Memories

Products	Bits		Length	Frequency (MHz)
	In	Out		
TMC2011A	8	8	18	30
TMC2011Ax1	8	8	18	40
TMC2111A	8	8	16	30
TMC2111Ax1	8	8	16	40

Digital Video Processors

Products	Function	Clock Rate (MHz)	Bits In (bits)	Bits Out (bits)	Format In	Format Out
TMC2330A	Coordinate Transformer	20	16 32	16 32	Rectangular Polar	Polar Rectangular
TMC2330Ax1	Coordinate Transformer	40	16 32	16 32	Rectangular Polar	Polar Rectangular

ANALOG & MIXED
SIGNAL

Encoders

Products	Format		Number of DACs	Macrovision Capable	MPEG Interface	Component (YUV or RGB)	Broadcast Formats (D1)	Sin x/x filters	CCIR-601 Compatible
	Input	Output							
TMC2192	CCIR601 CCIR656 Digital Composite	YC Composite Digital Composite	3	No	Yes	No	Yes	Yes	Yes
TMC2193	RGB CCIR601 CCIR656 Digital Composite	YPbPr Betacam YC Composite Digital Composite	4	No	Yes	Yes	Yes	Yes	Yes
TMC22091	YCrCb GBR RGB Color indexed CCIR601	YC Composite NTSC PAL	3	No	No	Yes	Yes	Yes	Yes
TMC22191	YCrCb GBR RGB Color indexed CCIR601	YC Composite NTSC PAL	3	No	No	Yes	Yes	Yes	Yes
TMC2490A	CCIR601 CCIR656 YCrCb	YC Composite NTSC PAL	3	No	Yes	No	No	Yes	Yes

Video Demo Boards

Products	Demo Board Name	Clock Rate	Bits In	Bits Out	Format In	Format Out
ML6415DEMO	ML6415 S-Video	7	N/A	N/A	Analog Composite Analog S-Video NTSC PAL	Analog Composite Analog S-Video NTSC PAL
ML6416DEMO	ML6416 S-Video	7	N/A	N/A	Analog Composite Analog S-Video NTSC PAL	Analog Composite Analog S-Video NTSC PAL
ML6429DEMO	ML6429 Quad Video	7	N/A	N/A	Analog RGB Analog Composite Analog S-Video Analog Component NTSC PAL	Analog RGB Analog Composite Analog S-Video Analog Component NTSC PAL
TMB2193MS100	TMB2193MS101	27	10 20 24	N/A	Digital RGB Digital YUV YCbCr 4:4:4 YCbCr 4:2:2 D1	Analog RGB Analog Composite Analog S-Video Analog Component NTSC PAL
TMB22153AMS101	TMB22153AMS100	27	N/A	10 20 30	Composite S-Video NTSC PAL	Digital RGB YCbCr 4:4:4 YCbCr 4:2:2 D1 NTSC PAL

Products by Technology — DIMM

Products	Product Description	Number of Drivers	Number of Receivers	Standard	Packages	Lead Free
74ALVC162839	Low Voltage 20-Bit Selectable Register/Buffer with 3.6V Tolerant Inputs and Outputs and 26 Ohm Series Resistors in the Outputs	–	–	–	TSSOP	No
74ALVCF322835	Low Voltage 36-Bit Universal Bus Driver with 3.6V Tolerant Outputs and 26 Ohm Series Resistors in Outputs	–	–	–	BGA	No
74VCX162835	Low Voltage 18-Bit Universal Bus Driver with 3.6V Tolerant Inputs/Outputs and 26 Ohm Series Resistors in Outputs	–	–	PC100 SDRAMs PC133 SDRAMs	TSSOP	No
74VCX162839	Low Voltage 20-Bit Selectable Register/Buffer with 3.6V Tolerant Inputs and Outputs and 26 Ohm Series Resistors in the Outputs	–	–	PC100 SDRAMs PC133 SDRAMs	TSSOP	No Yes
74VCX16722	Low Voltage 22-Bit Register with 3.6V Tolerant Inputs and Outputs	–	–	PC100 SDRAMs PC133 SDRAMs	TSSOP	No
74VCX16835	Low Voltage 18-Bit Universal Bus Driver with 3.6V Tolerant Inputs and Outputs	–	–	PC100 SDRAMs PC133 SDRAMs	TSSOP	No
74VCX16838	Low Voltage 16-Bit Selectable Register/Buffer with 3.6V Tolerant Inputs and Outputs	–	–	PC100 SDRAMs PC133 SDRAMs	TSSOP	No
74VCX16839	Low Voltage 20-Bit Selectable Register/Buffer with 3.6V Tolerant Inputs and Outputs	–	–	PC100 SDRAMs PC133 SDRAMs	TSSOP	No Yes
74VCXF162835	Low Voltage 18-Bit Universal Bus Driver with 3.6V Tolerant Outputs and 26 Ohm Series Resistors in Outputs	–	–	PC100 SDRAMs PC133 SDRAMs	TSSOP	No
SSTV16857	14-Bit Register with SSTL-2 Compatible I/O and Reset	–	–	DDR SDRAM	TSSOP	No Yes
SSTV16859	Dual Output 13-Bit Register with SSTL-2 Compatible I/O and Reset	–	–	DDR SDRAM	BGA TSSOP	No
SSTVN16857	14-Bit Register with SSTL-2 Compatible I/O (Preliminary)	–	–	–	TSSOP	No

Products by Technology — GTLP

Products	Product Description	Number of Drivers	Number of Receivers	Standard	Packages	Lead Free
GTLP10B320	10-Bit LVTTTL/GTLP Transceiver with Split LVTTTL Port and Feedback Path	–	–	GTLP	TSSOP	No
GTLP16612	CMOS 18-Bit TTL/GTLP Universal Bus Transceiver	–	–	GTLP	SSOP TSSOP	No
GTLP16616	17-Bit TTL/GTLP Bus Transceiver with Buffered Clock	–	–	GTLP	SSOP TSSOP	No
GTLP16617	17-Bit TTL/GTLP Synchronous Bus Transceiver with Buffered Clock	–	–	GTLP	SSOP TSSOP	No
GTLP16T1655	16-Bit LVTTTL/GTLP Universal Bus Transceiver	–	–	GTLP	TSSOP	No
GTLP17T616	17-Bit LVTTTL/GTLP Bus Transceiver with Buffered Clock	–	–	GTLP	SSOP TSSOP	No
GTLP18T612	18-Bit LVTTTL/GTLP Universal Bus Transceiver	–	–	GTLP	BGA SSOP TSSOP	No
GTLP1B151	1-Bit LVTTTL/GTLP Transceiver with Split LVTTTL Port and Feedback Path	–	–	GTLP	SOIC US8	No
GTLP2T152	2-Bit LVTTTL/GTLP Transceiver	–	–	GTLP	SOIC US8	No
GTLP36T612	36-Bit LVTTTL/GTLP Universal Bus Transceiver	–	–	GTLP	BGA	No
GTLP6C816	GTLP-to-TTL 1:6 Clock Driver	–	–	GTLP	TSSOP	No
GTLP6C816A	LVTTTL-to-GTLP Clock Driver	–	–	GTLP	TSSOP	No
GTLP6C817	Low Drive GTLP-to-LVTTTL 1:6 Clock Driver	–	–	GTLP	TSSOP	No
GTLP8T306	8-Bit LVTTTL-to-GTLP Bus Transceiver	–	–	GTLP	TSSOP	No

Products by Technology — IEEE 1284

Products	Product Description	Number of Drivers	Number of Receivers	Standard	Packages	Lead Free
74ACT1284	IEEE1284 Transceiver	–	–	IEEE 1284	SOIC SSOP TSSOP	No
74LVX161284	Low Voltage IEEE 161284 Translating Transceiver	–	–	IEEE 1284	SSOP TSSOP	No Yes
74LVX161284A	Low Voltage IEEE 161284 Translating Transceiver	–	–	IEEE 1284	TSSOP	No
74VHC161284	IEEE 161284 Transceiver	–	–	IEEE 1284	SSOP TSSOP	No Yes

Products by Technology — LVDS

Products	Product Description	Number of Drivers	Number of Receivers	Standard	Packages	Lead Free
FIN1001	3.3V LVDS 1-Bit High Speed Differential Driver	1	–	–	SOT-23	No
FIN1002	3.3V LVDS 1-Bit High Speed Differential Receiver	–	1	–	SOT-23	No
FIN1017	3.3V LVDS 1-Bit High Speed Differential Driver	1	–	RS-644	SOIC US8	No
FIN1018	3.3V LVDS 1-Bit High Speed Differential Receiver	–	1	RS-644	SOIC US8	No
FIN1019	3.3V LVDS High Speed Differential Driver/Receiver	1	1	RS-644	SOIC TSSOP	No Yes
FIN1022	2 X 2 LVDS High Speed Crosspoint Switch	2	2	–	SOIC TSSOP	No
FIN1025	3.3V LVDS 2-Bit High Speed Differential Driver	2	–	–	TSSOP	No
FIN1026	3.3V LVDS 2-Bit High Speed Differential Receiver	–	2	–	TSSOP	No
FIN1027	3.3V LVDS 2-Bit High Speed Differential Driver	2	2	RS-644	SOIC US8	No Yes
FIN1027A	3.3V LVDS 2-Bit High Speed Differential Driver	2	2	–	SOIC	No
FIN1028	3.3V LVDS 2-Bit High Speed Differential Receiver	–	2	RS-644	SOIC	No
FIN1031	3.3V LVDS 4-Bit High Speed Differential Driver	4	–	RS-644	SOIC TSSOP	No Yes
FIN1032	3.3V LVDS 4-Bit High Speed Differential Receiver	–	4	RS-644	SOIC TSSOP	No
FIN1047	3.3V LVDS 4-Bit Flow-Through High Speed Differential Driver	4	–	RS-644	SOIC TSSOP	No Yes
FIN1048	3.3V LVDS 4-Bit Flow-Through High Speed Differential Receiver	–	4	RS-644	SOIC TSSOP	No Yes
FIN1049	LVDS Dual Line Driver with Dual Line Receiver	2	2	–	TSSOP	No Yes
FIN1101	LVDS 1 Port High Speed Repeater	1	1	–	SOIC US8	No
FIN1102	LVDS 2 Port High Speed Repeater	2	2	–	TSSOP	No Yes
FIN1104	LVDS 4 Port High Speed Repeater	4	4	–	TSSOP	No
FIN1108	LVDS 8 Port High Speed Repeater	8	8	–	TSSOP	No
FIN1215	LVDS 21-Bit Serializers/De-Serializers	3	–	–	TSSOP	No
FIN1216	LVDS 21-Bit Serializers/De-Serializers	–	3	–	TSSOP	No
FIN1217	LVDS 21-Bit Serializers/De-Serializers	3	–	–	TSSOP	No
FIN1218	LVDS 21-Bit Serializers/De-Serializers	–	3	–	TSSOP	No
FIN1286	LVDS 28-Bit Serializers/De-Serializers (Preliminary)	–	4	–	TSSOP	No
FIN1288	LVDS 28-Bit Serializers/De-Serializers (Preliminary)	–	4	–	TSSOP	No
FIN1531	5V LVDS 4-Bit High Speed Differential Driver	4	–	RS-644	SOIC TSSOP	No

Products by Technology — LVDS (Continued)

Products	Product Description	Number of Drivers	Number of Receivers	Standard	Packages	Lead Free
FIN1532	5V LVDS 4-Bit High Speed Differential Receiver	–	4	RS-644	SOIC TSSOP	No Yes
FIN3383	Low Voltage 28-Bit Flat Panel Display Link Serializers	4	–	–	TSSOP	No
FIN3385	Low Voltage 28-Bit Flat Panel Display Link Serializers	4	–	–	TSSOP	No

Products by Technology — USB

Products	Product Description	Number of Drivers	Number of Receivers	Standard	Packages	Lead Free
USB1T1102	Universal Serial Bus Peripheral Transceiver with Voltage Regulator (Preliminary)	–	–	–	MHBCC	No
USB1T11A	Universal Serial Bus Transceiver	–	–	USB1.1	MLP SOIC TSSOP	No Yes

Products by Function — Analog Switches

Products	Function	Configuration	On Resistance (Ω)	Supply Voltage Range	Crosstalk (dB)	Off Isolation (dB)	Max Turn On Time (ns)	ESD (V)	Bandwidth (MHz)	R On Flatness (Ω)	Package
FSA1156	Analog Switch	SPST (NO)	0.75	1.65–5.5	–	-65	20	8000	300	0.2	MicroPak SC70
FSA1157	Analog Switch	SPST (NC)	0.75	1.65–5.5	–	-65	20	8000	300	0.2	MicroPak SC70
FSA1256	Analog Switch	SPST (NO)	0.95	1.65–5.5	-100	-70	35	5500	300	0.3	MicroPak
FSA1257	Analog Switch	SPST (NC)	0.95	1.65–5.5	-100	-70	35	5500	300	0.3	MicroPak
FSA1258	Analog Switch	SPST (NO/NC)	0.95	1.65–5.5	-100	-70	35	5500	300	0.3	MicroPak
FSA2257	Analog Switch	SPDT (NO/NC)	0.95	1.65–5.5	-75	-70	35	8000	350	0.3	MicroPak
FSA266	Analog Switch	SPST (NO)	6	1.65–5.5	-70	-55	3.2	4000	300	6	MicroPak US8
FSA3157	Analog Switch	SPDT (NO/NC)	5	1.65–5.5	-54	-57	5.2	4000	250	6	MicroPak SC70
FSA3357	Analog Switch	SP3T (NO/NC)	5	1.65–5.5	-60	-58	6.5	5500	250	6	US8
FSA4157	Analog Switch	SPDT (NO/NC)	0.95	1.65–5.5	-70	-70	35	7500	350	0.2	MicroPak SC70
FSA66	Analog Switch	SPST (NO)	5	1.65–5.5	–	-50	4.5	4000	250	6	MicroPak SC70 SOT-23
FSA1200	LAN Switch	2:01	6	3.0–5.5	-70	-55	20	5500	137	3	QSOP
FSA166	Analog Switch	SPST (NO)	5	1.65–5.5	–	-50	4.5	4000	250	6	MicroPak SC70
FSAU3157	Analog Switch	SPDT (NO/NC)	5	1.65–5.5	-54	-57	5.2	4500	250	6	SC70
FSAV330	Video Switch	SPDT	3	4.75–5.25	-73	-56	5.2	4000	300	–	QSOP SOIC TSSOP
FSAV331	Video Switch	4:01	3	4.75–5.25	-54	-84	5.3	2000	368	–	QSOP TSSOP
FSAV332	Video Switch	SPST	3	4.75–5.25	-58	-38	5	4000	250	–	QSOP TSSOP
FSTD16211	Translator	SPST	4	4.5–5.5	–	–	5.5	4000	–	–	BGA TSSOP
FSTD16450	Translator	SPST	4	4.0–5.5	–	–	6.5	5500	–	–	BGA TSSOP
FSTD16861	Translator	SPST	4	4.5–5.5	–	–	6	5000	–	–	TSSOP
FSTD3125	Translator	SPST (NC)	4	4.0–5.5	–	–	6.1	2000	–	–	QSOP SOIC TSSOP
FSTD32211	Translator	SPST	4	4.0–5.5	–	–	10	4000	–	–	BGA
FSTD3306	Translator	SPST (NC)	3	4.0–5.5	–	–	5.8	4000	–	–	TSSOP
FSTUD16211	Translator	SPST	4	4.0–5.5	–	–	5.5	4000	–	–	BGA TSSOP
FSTUD162450	Translator	SPST	26	4.0–5.5	–	–	8	5000	–	–	BGA TSSOP

Products by Function — Analog Switches (Continued)

Products	Function	Configuration	On Resistance (Ω)	Supply Voltage Range	Crosstalk (dB)	Off Isolation (dB)	Max Turn On Time (ns)	ESD (V)	Bandwidth (MHz)	R On Flatness (Ω)	Package
FSTUD16450	Translator	SPST	4	4.0–5.5	–	–	6.5	5500	–	–	BGA TSSOP
FSTUD32450	Translator	SPST	4	4.0–5.5	–	–	6.5	5000	–	–	BGA
FSUSB11	USB Switch	SPDT (NO/NC)	0.95	1.65–5.5	-75	-70	–	8000	350	0.2	MicroPak
NC7SB3157	Analog Switch	SPDT	5	1.65–5.5	-54	-57	5.2	4000	250	6	MicroPak SC70
NC7SBU3157	Analog Switch	SPDT	5	1.65–5.5	-54	-57	5.2	4500	250	6	SC70
NC7SZ66	Analog Switch	SPST (NO)	5	1.65–5.5	–	-50	4.5	2000	–	–	MicroPak SC70 SOT-23
NC7SZD384	Translator	SPST (NC)	5	4.5–5.5	–	–	7.5	2000	–	–	MicroPak SC70 SOT-23
NC7WB66	Analog Switch	SPST (NO)	6	1.65–5.5	-70	-55	3.2	4000	300	6	MicroPak US8
NC7WBD3125	Translator	SPST (NC)	3	4.5–5.5	–	–	5.8	2000	–	–	MicroPak US8
NC7WBD3306	Translator	SPST (NC)	3	4.5–5.5	–	–	5.8	4000	–	–	MicroPak US8

Analog and Mixed Signal

PDF links for all the packaging information is at: <http://www.fairchildsemi.com/products/analog/packaging/amspkg.html>

Package Name	Package Suffix for:												Packaging Standard		
	FAN, RC, RM, RV Prefixes	FM Prefix	FMS, TMC Prefixes	FS Prefix	FSD Prefix	ILC Prefix	KA Prefix	LF, LM, NE Prefixes	MC Prefix	ML Prefix	SG, UC Prefixes	TL Prefix	Pkg Method	Qty (pcs)	Suffix
DIP-7 (Plastic)					No Suffix								Tube/Box	50/3000	
DIP-8 (Plastic)	N						*No Suffix & N	N	P		N	P	Tube/Box	50/3000	
DIP-28 (Plastic)			N6										Tube/Box	13/780	
DIPH-8 (Plastic)				No Suffix									Tube/Box	50/3000	
DIP-14 (Plastic)							No Suffix	N	P		N		Tube/Box	25/1500	
DIP-14 (Plastic)	N												Tube/Box	25/800	
DIP-16 (Plastic)	N						No Suffix	N	P		N	N	Tube/Box	25/1500	
DIP-22 (Plastic)							No Suffix						Tube/Box	17/612	
MLP-6	MP												Tape & Reel	3000	
MLP-8	MP												Tape & Reel	3000	
MQFP-80			KL										Tray	66	
MQFP-100			KH										Tray	tbd	
MQFP-100			KJ										Tray	tbd	
MQFP-128			KB										Tray	tbd	
MQFP-128			KC										Tray	tbd	
MSOP-8	MU												Tape & Reel	3000	
MSOP-10	MU												Tape & Reel	3000	
PLCC-28	QA						No Suffix						Tube/Box	35/750	
PLCC-28			R3										Tube/Box	tbd	
PLCC-44	QB												Tube/Box	25/500	
PLCC-44	QB												Tape & Reel	500	
PLCC-44			R2										Tube/Box	tbd	
PLCC-68			R1										Tube/Box	tbd	
PLCC-84			RO										Tube/Box	tbd	
PSOP-16										U			Tape & Reel	2500	
QFP-1010B-44							No Suffix						Tray	1600	
QFP-1010E-48							No Suffix						Tray	1600	
QFPH-1414-48							No Suffix						Tray	840	
QSOP-16	QSC												Tape & Reel	2500	
QSOP-20	QSC												Tape & Reel	2500	
QSOP-24	QSC												Tape & Reel	2500	
QSOP-28	QSC												Tape & Reel	2500	
SC70-3		P3								C3			Tape & Reel	3000	
SC70-5	P5												Tape & Reel	3000	
SC70-6	S7												Tape & Reel	3000	
SDIP-24 (.050" Pitch)							No Suffix						Tube/Box	20/1200	

Analog and Mixed Signal (Continued)

 PDF links for all the packaging information is at: <http://www.fairchildsemi.com/products/analog/packaging/amspkg.html>

Package Name	Package Suffix for:													Packaging Standard		
	FAN, RC, RM, RV Prefixes	FM Prefix	FMS, TMC Prefixes	FS Prefix	FSD Prefix	ILC Prefix	KA Prefix	LF, LM, NE Prefixes	MC Prefix	ML Prefix	SG, UC Prefixes	TL Prefix	Pkg Method	Qty (pcs)	Suffix	
SDIPH-32 (.400") (Plastic)							No Suffix						Tube/Box	16/576		
SIP-9							No Suffix						Tube/Box	22/1760		
SIP-10							No Suffix						Tube/Box	19/1368		
SIPHA-10							No Suffix						Tube/Box	18/168		
SIPH-B-10							No Suffix						Tube/Box	17/612		
SOIC-8	M							M	D		D		Tape & Reel	2500	TF	
SOIC-8			M	D				M	D		D	D	Tube/Box	95/9500		
SOIC-14	M							M			D		Tape & Reel	2500		
SOIC-14	D							M			D		Tube/Box	55/5500		
SOIC-16	M												Tape & Reel	2500	TF	
SOIC-16	M												Tube/Box	48/4800		
SOIC-20	M												Tape & Reel	1000		
SOIC-20	D												Tube/Box	36/4320		
SOIC-24	M												Tape & Reel	1000		
SOIC-24	M												Tube/Box	30/3600		
SOIC-28	M												Tape & Reel	1000		
SOP-7L					M								Tube/Box	90/8100		
SOP-7L					M								Tape & Reel	3000		
SOP-8 (225)					L			M	D		D	D	Tube/Box	90/8100		
SOP-8 (225)					L			M	D		D	D	Tape & Reel	3000	TF	
SOP-8 (225)								D					Tape & Reel	2500	STF	
SOP-14 (225B)								D					Tube/Box	54/4860		
SOP-14 (225B)								D					Tape & Reel	3000	TF	
SOP-16 (225)								D					Tube/Box	45/4050		
SOP-16 (225)								D					Tape & Reel	3000	TF	
SOP-22 (300)								D					Tube/Box	30/2100		
SOP-22 (300)								D					Tape & Reel	2000	TF	
SOT-223	S												Tape & Reel	4000		
SOT-23-3		S3				CM							Tape & Reel	3000	T or X	
SOT-23-5	M												Tape & Reel	3000	T or X	
SOT-89-3								M					Tape & Reel	3000		
SOT-89								M					Tape & Reel	3000	TF	
SSOP-20	G												Tape & Reel	2000	T or X	
SSOP-30 (375)								D					Tube/Box	35/2100		
SSOPH-28 (300)								D					Tape & Reel	2000	TF	
SSOPH-28 (300)								D2					Tube/Box	30/1800	TF	
SSOPH-28 (375)								D					Tape & Reel	2000	TF	

Analog and Mixed Signal (Continued)

 PDF links for all the packaging information is at: <http://www.fairchildsemi.com/products/analog/packaging/amspkg.html>

Package Name	Package Suffix for:												Packaging Standard		
	FAN, RC, RM, RV Prefixes	FM Prefix	FMS, TMC Prefixes	FS Prefix	FSD Prefix	ILC Prefix	KA Prefix	LF, LM, NE Prefixes	MC Prefix	ML Prefix	SG, UC Prefixes	TL Prefix	Pkg Method	Qty (pcs)	Suffix
SSOPH-28 (375SG2)							D2						Tape & Reel	2000	TF
T0-220	T						No Suffix	T	T				Tube/Box	50/1000	TU
T0-220	T												Bulk	20/1000	
T0-220-5L				C			C						Tube/Box	50/1000	TU/YDTU
T0-220F-4L				No Suffix			No Suffix						Tube/Box	50/1000	TU/YDTU
T0-220F-4L				No Suffix			No Suffix						Tube/Box	200/1200	TU/YDTU
T0-220F-5L				T			T						Tube/Box	50/1000	TU/YDTU
T0-220F-6L				K									Tube/Box	50/1000	
T0-252-3 (DPAK)								DT	DT				Tape & Reel	2000	X**
T0-252-3 (DPAK)	D							DT	DT				Tape & Reel	2500	XM**
T0-252-3 (DPAK)							R						Tape & Reel	2000	TF**
T0-252-3 (DPAK)	D						R						Tape & Reel	2500	TM**
T0-252-3 (DPAK)	D						R						Tube/Box	75/1000	
T0-252-3 (DPAK)	D												Tape & Reel	2500	X
T0-252-5	D			D			D						Tape & Reel	1500	
T0-3P-5L				No Suffix			No Suffix						Tube/Box	30/360	TU/YDTU
T0-3PF-5L							F						Tube/Box	30/360	TU/YDTU
T0-92							Z	Z	P				Tape & Reel	2000	X
T0-92							Z	Z	P				Bulk	10000	
T0-92							Z	Z	P				Ammo Pack	2000	XA
T0-92							Z	Z	P				Tape & Reel	2000	TF
T0-92							Z	Z	P				Ammo Pack	2000	TA
T0-92							Z	Z	P				Bulk	1000	
T0-92	T						Z	Z	P				Bulk	10000	
eTSSOP™-16	MTF												Tape & Reel	2500	
TSSOP-14	MTC												Tape & Reel	2500	
TSSOP-14	MTC												Tube/Box	25/2350	
TSSOP-16													Tape & Reel	2500	
TSSOP-20	G												Tape & Reel	2500	
TSSOP-20	G												Tube/Box	73/1200	
TSSOP-24	MTC												Tape & Reel	2500	
TSSOP-24	MTC												Tube/Box	61/6100	
TSSOP-28	MTC												Tape & Reel	2500	

Note: In the M version of the Tape & Reel, the devices are rotated 90° to allow more devices per reel.

* For KA Prefixes:

- 1) Std Linear devices use No Suffix for package designation
- 2) Offline Conversion ICs (FPS) use N for package Suffix

** Package orientation in the tape determines the reel quantity. Review tape and reel spec for details.

Analog and Mixed Signal

Fairchild Power Switch

FS6 M 12 65 3 R T

Product Revision Code
A/B

Package Type

Package	Suffix	Package	Suffix
TO-220F-4L	No Suffix	D ² PAK-6L	J
TO-3P-5L	No Suffix	TO-3PF-5L	F
TO-220-5L	C	TO-3PF-7L	P
TO-220F-5L	T	DIP-8L	N
D ² -PAK-5L	D	DIPH-8L	H
TO-220F-6L	K	SOP-8L	L
TO-220-6L	G	SOP-7L	M
I ² PAK-6L	I		

Protection Mode
No Suffix: Latch-up Mode
R: Auto-Restart Mode

Peak Current Limit of Control IC
No Letter: Default Value
3: 3A
6: 6A: Option Device

MOSFET's Voltage Rating
65: 650V
80: 800V

MOSFET's Continuous Current Rating
06: 6A
12: 12A

Frequency
H: 100 kHz
M: 70 kHz
L: 50 kHz
P: Adjustable
S: Sync. for Monitor
Q: Quasi Resonant for Color TV

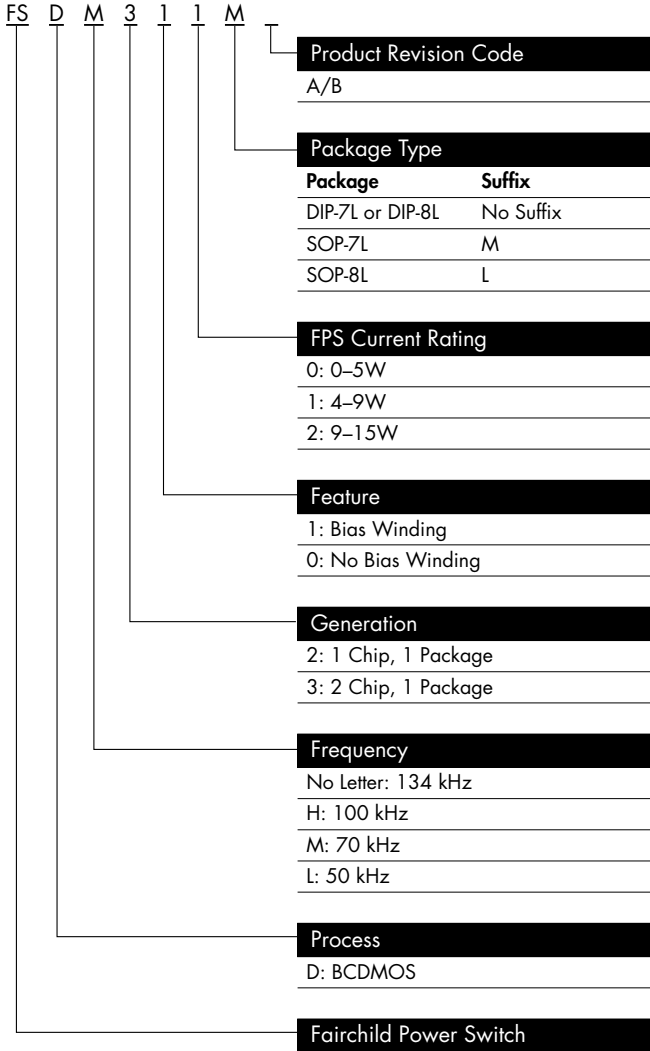
KA and FS Series Prefix

Generation	Application			Added Features
	Gen	CTV	Mon	
First	KA1L/M/H	KA3S	KA2S	Standard
Second	KA5L/M/H/P	KA5Q	KA5S	Multi Protection
			FSXS FSXM	Burst Mode Operation

ORDERING GUIDES

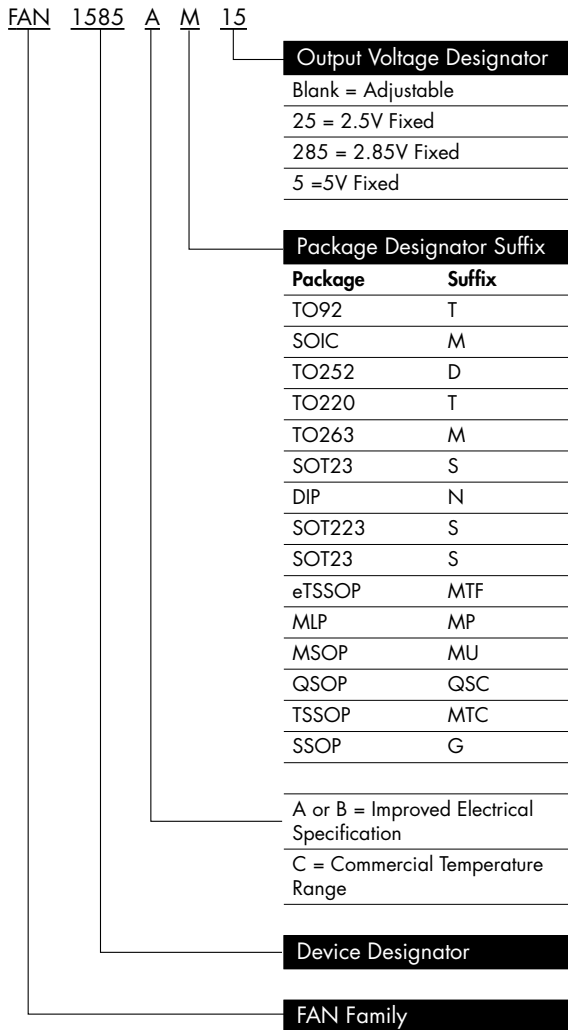
Analog and Mixed Signal (Continued)

Fairchild Power Switch (Continued)

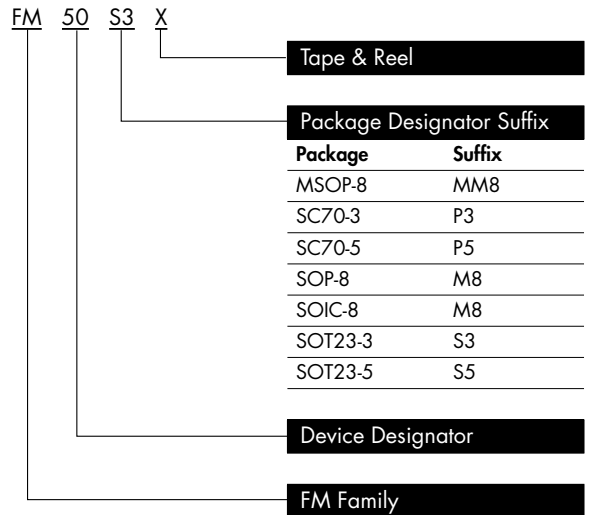


Analog and Mixed Signal (Continued)

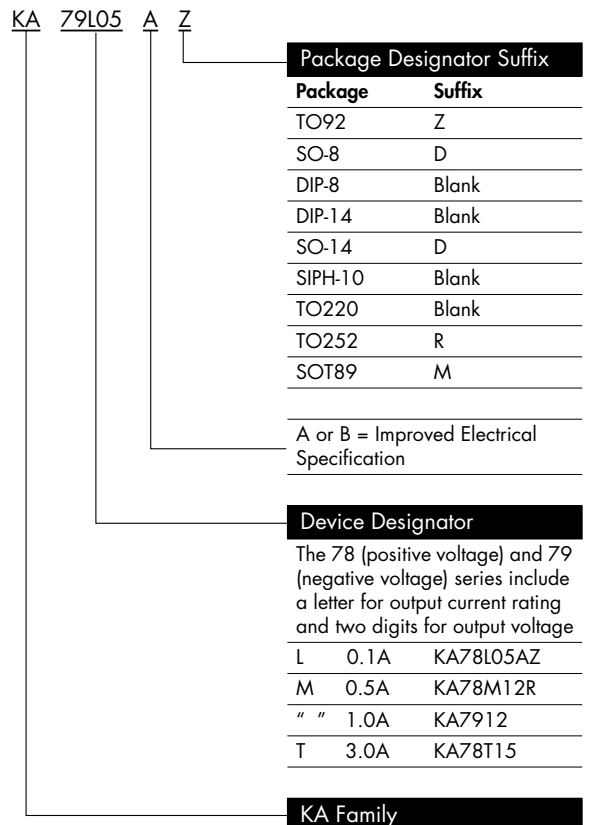
FAN Series



FM Series

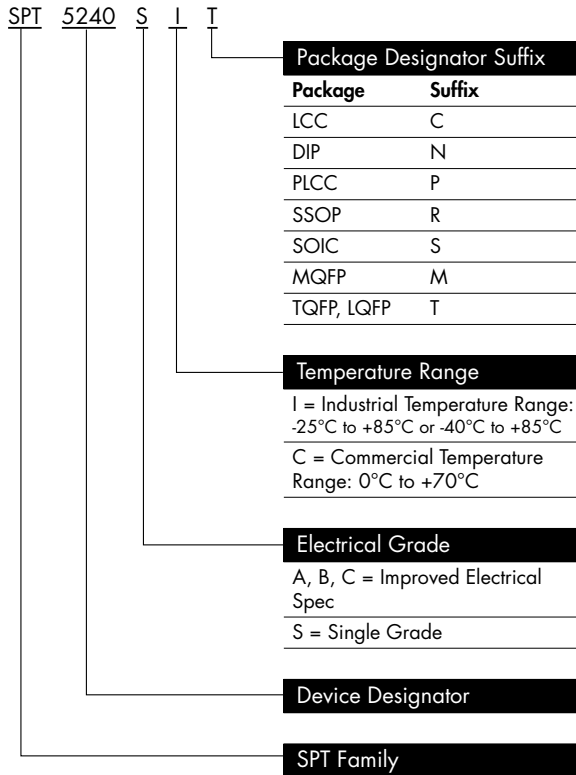


KA Series

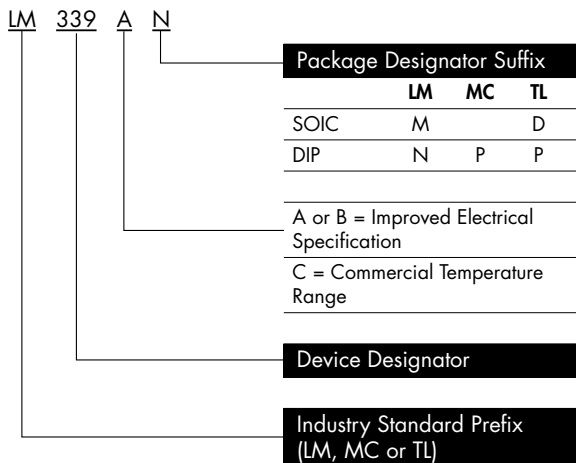


Analog and Mixed Signal (Continued)

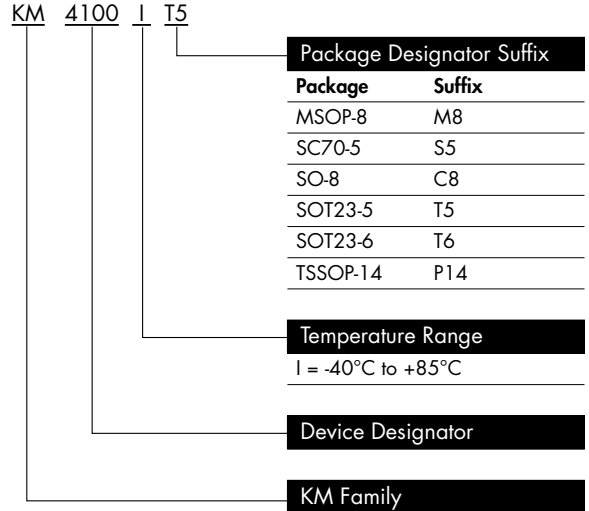
SPT Series



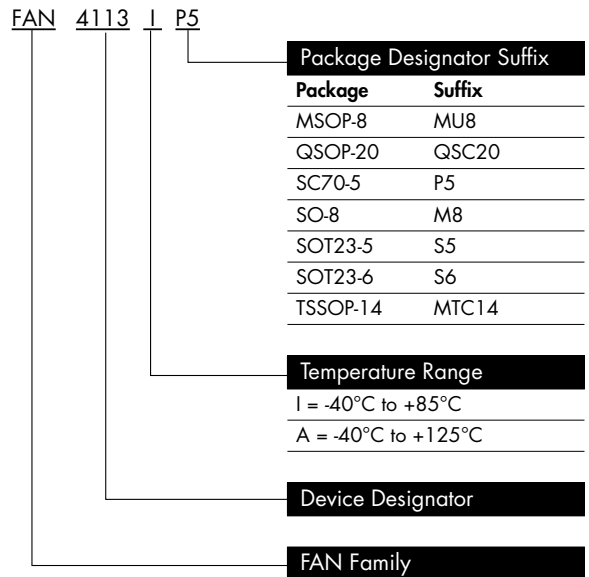
Industry Standard Series



KM Series



FAN4000 – FAN4499 Series



Analog and Mixed Signal (Continued)

TMC Series

TMC 2242 C KT C

Temperature Range

C = 0 to 70°C

A = -40 to 70°C

V = -55 to 125°C

Package Designator Suffix

Package	Suffix	Package	Suffix
120-lead QFP	H6	44-lead Metric QFP	KT
128-lead Metric QFP with heatsink	KC	24-lead SOIC	M7
120-lead MQFP	KE	24-lead PDIP	N2
100-lead Metric QFP	KH	84-lead PLCC	R0
100-lead Metric QFP with heatsink	KJ	68-lead PLCC	R1
80-lead Metric QFP	KL	44-lead PLCC	R2
48-lead LQFP	KR	28-lead PLCC	R3

A, B, C = Improved Electrical Specification

Device Designator

Video Family

FMS Series

FMS 6418 A M16 X

Tape and Reel

Package Designator Suffix

Package	Suffix
SO-8	S
SO-16	M16
SSOP-28	MSA28
TQFP-32	CH
TSSOP-14	MTC14
TSSOP-20	MTC20
QFP-48	KR

Electrical Grade

A, B, C = Improved Electrical Specification

Device Designator

FMS Family

Fairchild Semiconductor's Design Center offers a wide range of design tools including online selection and simulation tools, software downloads, and developer kits. Details can be found below. The web site for this information is <http://www.fairchildsemi.com/designcenter/>

Design Tools

FETBench

http://www.transim.com/fairchild/fairchild_index.html
(Registration required)

MOSFET design workbench featuring WebSIM™ and other resources for the design engineer

Power Factor Correction (PFC) Toolkit

<http://www.fairchildsemi.com/designcenter/pfc>
(Registration required)

This online toolkit contains tutorials, topology recommendations, product selection tools as well as other design recommendations for PFC applications.

Power Supply Design Toolkit

<http://www.fairchildsemi.com/designcenter/acdc>
(Registration required)

This online tool features tutorials, selection tools, and design aids specifically addressing AC/DC designs. Included is a step by step design tool using Fairchild Power Switches (FPS™).

Synchronous buck MOSFET loss calculations with Excel Model (.pdf)

<http://www.fairchildsemi.com/designcenter/>

Developer Tools

ACEx™ Developer Tool Kit

http://www.fairchildsemi.com/products/micro/acex_dtk.html

Models and Simulation Tools

<http://www.fairchildsemi.com/models>

Fairchild provides a full range of simulation resources including SPICE and IBIS models, as well as simulation tools.

Sample Code

ACEx™ sample code downloads

http://www.fairchildsemi.com/products/micro/sw/sample_code.html

Download code to assist in your designs with ACEx™

Training & Seminars

Archived webcasts

<http://www.fairchildsemi.com/power/pwrsemwebcast03.html>

Contents:

- Flyback Converters – Fairchild Power Switch (FPS™)
- Practical aspects of feedback control
- Power Factor Correction
- DC-DC Solutions (Control)
- High-Voltage Discrete Technology
- DC-DC Solutions (MOSFETs)
- Motor Solutions

Quality System

The success of Fairchild is dependent upon the level of service that we can provide to our customers. One of the ways that we provide this high level of service is through a comprehensive quality system. Fairchild's Quality Strategy stresses four key areas:

- Designing In Quality
- Building In Quality
- Customer Service
- Continuous Improvement

This quality system bolsters Fairchild's strategic initiatives of product innovation, cost-effective manufacturing and superior customer service.

Fairchild has a strong focus on *Supplier Quality*. Quality systems and programs are in place for all Fairchild suppliers worldwide including direct raw materials, fabrication, assembly and test subcontractors. These include a comprehensive rating system, controlled supplier lists, documented qualification procedures and environmental standards specifications.

Fairchild is committed to *Development Quality*. Development processes are based on the QS9000 Advanced Product Quality Planning (APQP) methodology. APQP is a concurrent engineering process that examines the processes, products and technologies to assure the end products work optimally. These developmental processes include a phase review system wherein at each point in the process, there is an opportunity to decide whether to continue or discontinue development as appropriate. Integral to the APQP methodology is the use of Failure Mode and Effects Analysis (FMEA) to examine the various ways that product, process or equipment failures can occur and develop control plans to proactively prevent the failures.

Fairchild's *Manufacturing Quality* systems are founded on the principles of Built-In Quality. Quality is an integral part of every step in the manufacturing process, starting with the development process itself. Fairchild's Manufacturing and Engineering groups make extensive use of statistical methods such as Design of Experiments to determine optimal process parameters and Statistic Process Control (SPC) to monitor the process performance. Continuous Improvement efforts use information available from sources such as customers, process control monitors, reliability testing and final test operations to generate action plans that will push the factories ever closer to quality perfection.

Service Quality is not just an afterthought at Fairchild. It is a major part of our quality system. An integral part of Fairchild's Service Quality is the Customer Quality Engineering (CQE) group, which is a global organization of engineers dedicated to addressing all process, product or service quality issues that customers may have. CQE also acts as the customer advocate within Fairchild and is available to support customers with qualification information, surveys, questionnaires and other inquiries. Additional service support is available through a new virtual organization of customer quality champions who are trained and certified to provide direct customer support from each of Fairchild's manufacturing sites. Fairchild's service quality includes fully equipped failure analysis labs at all manufacturing locations to test customer returned samples.

The Future

All of Fairchild's manufacturing sites are in the process of enhancing their quality systems to meet the requirements of the TS-16949 standard. Quality systems based on this standard have a very strong link to the associated business processes. Another part of our future direction is an active focus on environmental quality. With the billions of parts that semiconductor manufacturers ship, it is imperative that these products do not contaminate the environment. Fairchild is contributing to this effort through compliance to industry standards such ISO-14001, conversion to lead-free plating, elimination of hazardous or restricted substances in our products and minimization of waste from our manufacturing processes.

We will continue to improve our processes, products and services to provide customers with design solutions that offer a true competitive advantage. This drive for continuous improvement is ingrained in our culture and a key to the future success of Fairchild Semiconductor and our customers.