GENERAL DESCRIPTION

The OEM-boards can be used in applications where surface mounted assembly is not possible or where fast and easy setup of a prototype application is necessary. All OEM-boards are delivered with the corresponding pin socket for easy attachment onto a custom motherboard.

TECHNICAL DESCRIPTION

The OEM-board has an onboard reset monitoring IC (TC1270S) and decoupling capacitors for the power supplies.
One 40-pin header is present on all OEM-boards and have all necessary pins routed out from the Bluetooth module.
Bluetooth multimedia modules also have a 14-pin header to connect stereo speakers and microphone.
Note that all pins on the header is not connected to the module, please use the full datasheet for each module for more information about the functionality of the available pins on the pin header.

40-pin header (all OEM-boards)

Pin nr	Description	Direction
1	+VCC_BT	Power
2	GND	GND
3	+VCC_PA	Power
4	SPI_CLK	I/O
5	/RESET	IN
6	SPI_MISO	I/O
7	GND	GND
8	SPI_MOSI	I/O
9	TX	OUT
10	SPI_CSB	I/O
11	RX	IN
12	GND	GND
13	CTS	OUT
14	PCM_CLK	I/O
15	RTS	IN
16	PCM_OUT	OUT
17	USB-	I/O
18	PCM_SYNC	I/O
19	USB+	I/O
20	PCM_IN	IN
21	GND	GND
22	GND	GND
23	PIO[5]	GPIO
24	PIO[6]	GPIO
25	PIO[4]	GPIO
26	PIO[7]	GPIO
27	PIO[3]	GPIO
28	PIO[8]	GPIO
29	PIO[2]	GPIO
30	PIO[9]	GPIO
31	PIO[1]	GPIO
32	PIO[10]	GPIO
33	PIO[0]	GPIO
34	PIO[11]	GPIO
35	GND	GND
36	GND	GND
37	AIO[0]	GPIO
38	AIO[3]	GPIO
39	AIO[1]	GPIO
40	AIO[2]	GPIO

14-pin header (only multimedia modules)

Pin nr	Description	Direction
1	GND	GND
2	GND	GND
3	IN_N_R	IN
4	OUT_P_R	OUT
5	IN_P_R	IN
6	OUT_N_R	OUT
7	GND	GND
8	GND	GND
9	IN_N_L	IN
10	OUT_P_L	OUT
11	IN_P_L	IN
12	OUT_N_L	OUT
13	AUX_DAC	OUT
14	GND	GND

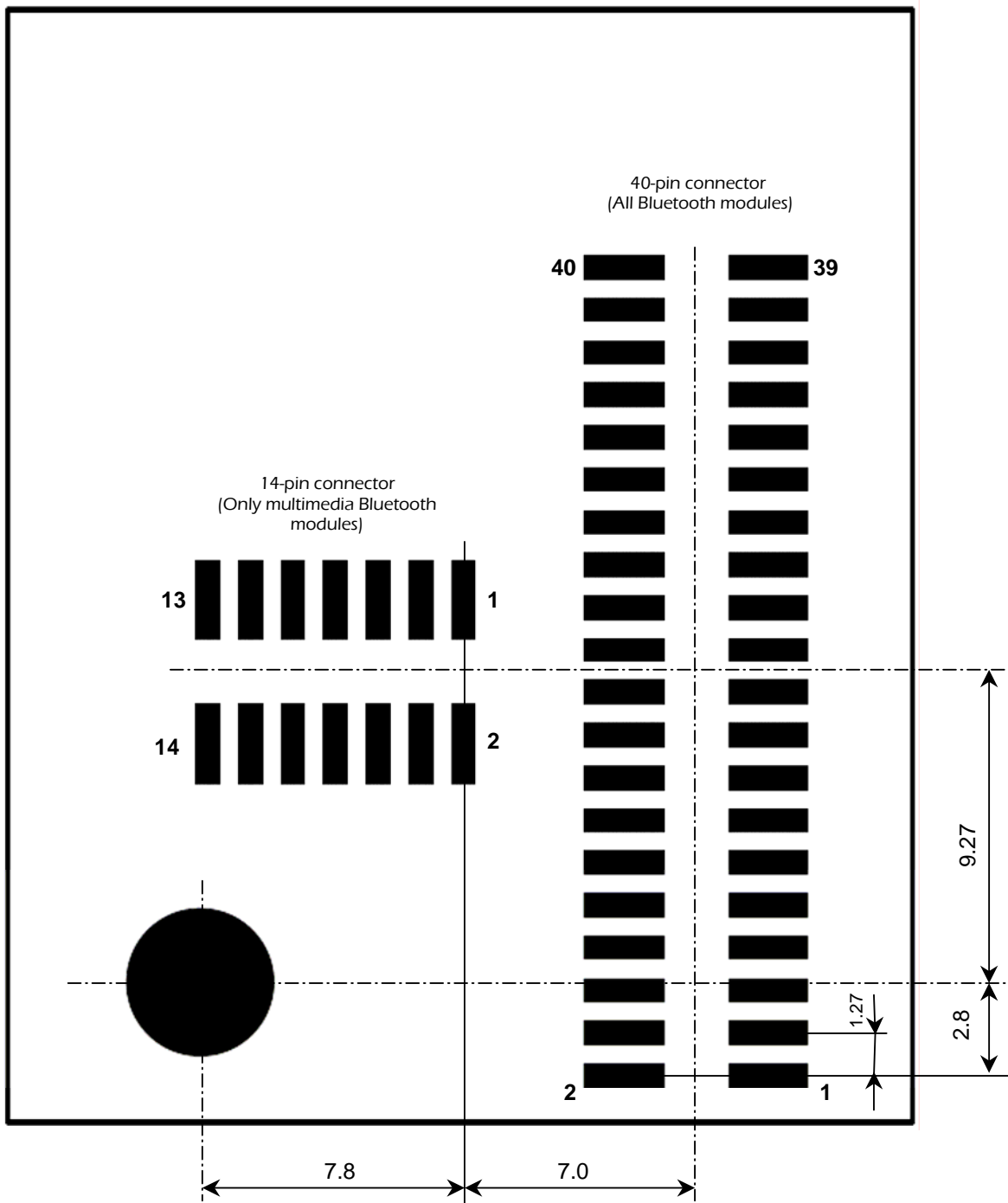| Connector information		
Part	Partnr.	Manufacturer
40-pin header	BB02-BS401-KB5-030B00	Gradconn
14-pin header	BB02-BS141-KB5-030B00	Gradconn
40-pin socket	BB02-CR402-K05-000000	Gradconn
14-pin socket	BB02-CR142-K05-000000	Gradconn

Pitch: 1.27mm

Image of F2M02GLA
(top view)

Image of F2M02MLA
(bottom view)

LAYOUT

bottom view [mm]

40-pin connector
(All Bluetooth modules)

40 **39**

14-pin connector
(Only multimedia Bluetooth modules)

13 **1**

14 **2**

9.27

1.27

2.8

2 **1**

7.8 7.0

ORDERING INFORMATION

Part nr.	Description
F2M02MLA-S03	OEM-board with a F2M03MLA Bluetooth module and Wireless Audio firmware
F2M02GLA-S01	OEM-board with a F2M03GLA Bluetooth module and the Wireless UART v4 firmware
F2M02GX-S01	OEM-board with a F2M03GX Bluetooth module and the Wireless UART v4 firmware
F2M02GXA-S01	OEM-board with a F2M03GXA Bluetooth module and the Wireless UART v4 firmware