

LM2787 Evaluation Board

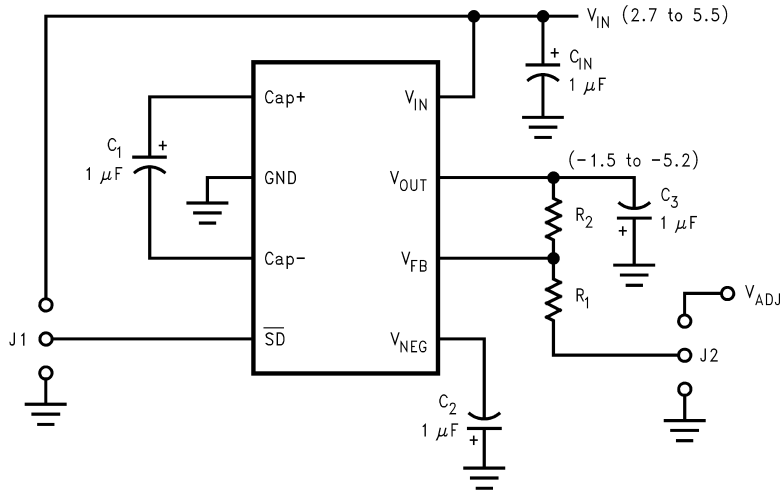
National Semiconductor
Application Note 1209
Clinton Jensen
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This application note provides the schematic and bill of materials for the LM2787 evaluation board. The board was designed specifically for evaluation and therefore is not optimized for the smallest size. Included in the layout are extra pads for all capacitors so a variety of values and case sizes can be tested. The resistors are physically large to make changing the output voltage via feedback resistors easy. The

output voltage may also be changed to any acceptable value, or dynamically, by placing the shunt "V_{fb Sel}" in the "V_{ADJ}" position and applying a voltage on the "V_{ADJ}" pin. The default is "V_{fb Sel}" in the "GND" position and an output voltage of -2.4V. Since the output ripple is very low, a direct connection for a scope probe (eliminating the ground lead) is included for monitoring the output.

Evaluation Board Schematic



20027301

Bill of Materials

Designation	Description	Value	Manufacturer
U1	LM2787, micro SMD		National Semiconductor
C _{IN}	Input Capacitor	1 µF, X7R Ceramic, 0805	Taiyo Yuden
C1A	Charge Pump Capacitor	1 µF, X7R Ceramic, 0805	Taiyo Yuden
C2A	Charge Pump Output Capacitor	1 µF, X7R Ceramic, 0805	Taiyo Yuden
C3A	LDO Output Capacitor	1 µF, X7R Ceramic, 0805	Taiyo Yuden
R1	Feedback Resistor	261 kΩ, 1206	Any
R2	Feedback Resistor	261 kΩ, 1206	Any

Notes

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