

## AN-1209 LM2787 Evaluation Board

This evaluation board 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<sub>tb</sub> Sel" in the "V<sub>ADJ</sub>" position and applying a voltage on the "V<sub>ADJ</sub>" pin. The default is "V<sub>tb</sub> Sel" in the "GND" position and an output voltage of -2.4 V. Since the output ripple is very low, a direct connection for a scope probe (eliminating the ground lead) is included for monitoring the output.

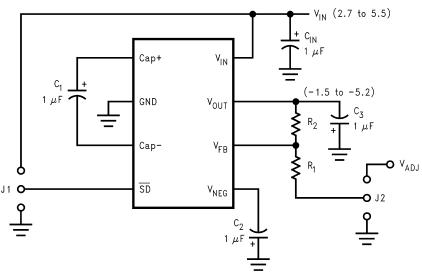


Figure 1. Evaluation Board Schematic

## Table 1. Bill of Materials (BOM)

Description	Value	Manufacturer
LM2787, DSBGA		Texas Instruments
Input Capacitor	1 µF, X7R Ceramic, 0805	Taiyo Yuden
Charge Pump Capacitor	1 µF, X7R Ceramic, 0805	Taiyo Yuden
Charge Pump Output Capacitor	1 µF, X7R Ceramic, 0805	Taiyo Yuden
LDO Output Capacitor	1 µF, X7R Ceramic, 0805	Taiyo Yuden
Feedback Resistor	261 kΩ, 1206	Any
Feedback Resistor	261 kΩ, 1206	Any
	LM2787, DSBGA Input Capacitor Charge Pump Capacitor Charge Pump Output Capacitor LDO Output Capacitor Feedback Resistor	LM2787, DSBGAInput Capacitor1 μF, X7R Ceramic, 0805Charge Pump Capacitor1 μF, X7R Ceramic, 0805Charge Pump Output Capacitor1 μF, X7R Ceramic, 0805LDO Output Capacitor1 μF, X7R Ceramic, 0805Feedback Resistor261 kΩ, 1206

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