

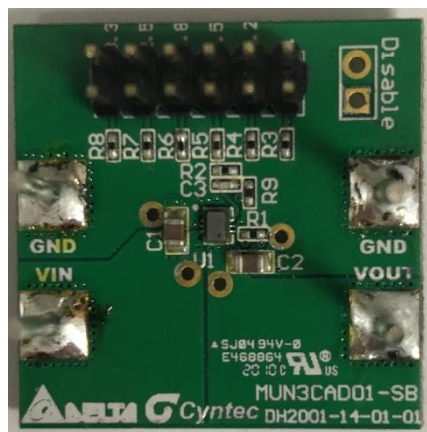
DESCRIPTION:

The evaluation board is for the MUN3CAD01-SB, high efficiency DC/DC power module. The evaluation board is generates a +1.8V output voltage at load currents up to 1.2A from a 2.5V and 5.5V input voltage range. Output setting resistor R3 to R8 can be adjusted for evaluating different output voltage. The MUN3CAD01-SB switches at 3.0MHz and achieve up to 90% efficiency with the supplied components.

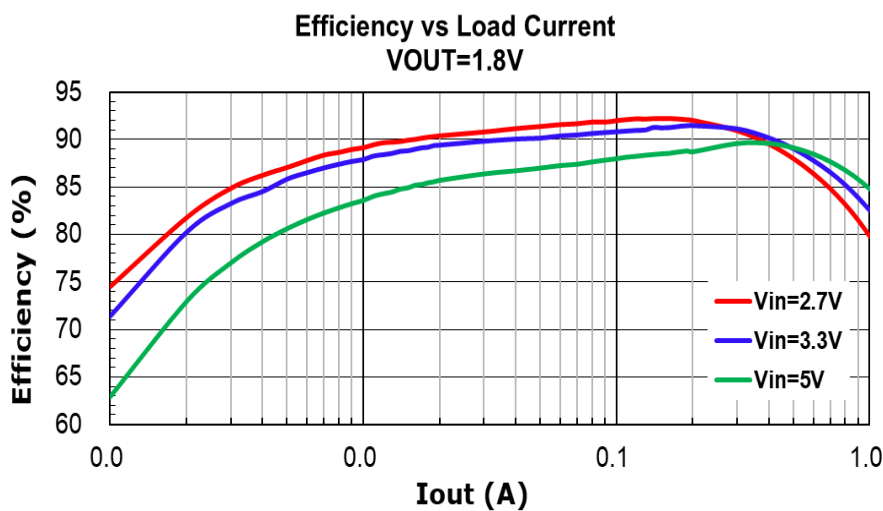
ELECTRICAL SPECIFICATION:

Parameters	Symbol	Value	Unit
Input Voltage Range	VIN	2.5~5.5	V
EN Voltage Range	EN	1.5~5.5	V
Output Voltage	VOUT	1.8	V
Output Current	IOUT	1.2	A

EVALUATION BOARD:



EFFICIENCY:



QUICK START:

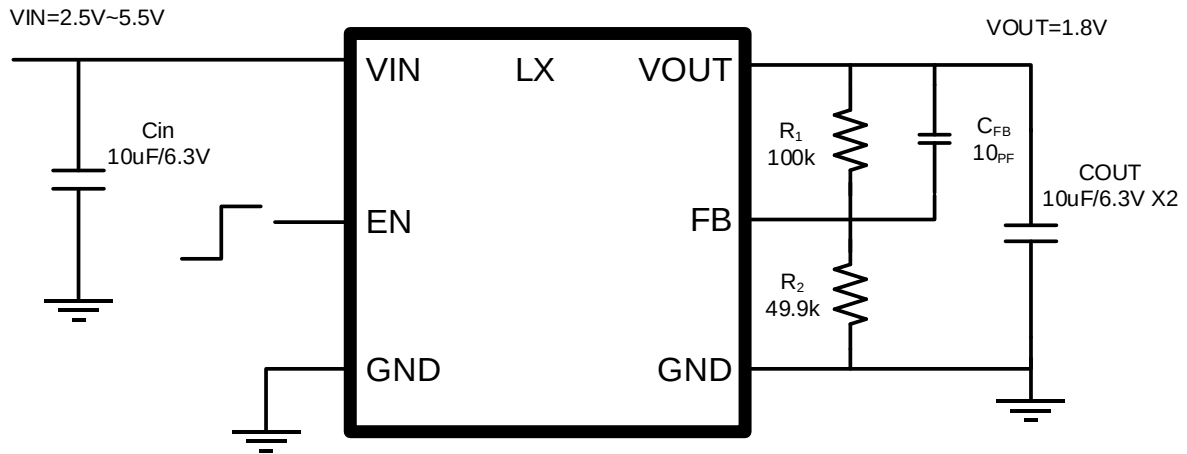
The output voltage of this board is preset to 1.8V.

The output voltage VOUT can be programmed by varying R1 and R2. Calculate the new value using the formula:

$$V_{OUT}(V) = 0.6 \times \left(1 + \frac{R1}{R2}\right)$$

Vout (V)	R1 (kΩ)	R2(kΩ)
1.0	100(1%)	R3: 150(1%)
1.2	100(1%)	R4: 100(1%)
1.5	100(1%)	R5: 66.5(1%)
1.8	100(1%)	R6: 49.9(1%)
2.5	100(1%)	R7: 31.6(1%)
3.3	100(1%)	R8: 22.1(1%)

EVALUATION BOARD SCHEMATIC:



TYPICAL APPLICATION FOR PWM OPERATION

BILL OF MATERIALS:

Qty	Ref.	Value	Description	Package	Manufacture
3	C1,C2,C3	10uF/6.3V	Ceramic Cap	0805	- Murata
1	C3	10pF	Ceramic Cap	0402	Murata
1	R1	100kohm	Chip Resistor	0402	Cyntec
1	R2	100kohm	Chip Resistor	0402	Cyntec
1	R3	150kohm	Chip Resistor	0402	Cyntec
1	R4	100kohm	Chip Resistor	0402	Cyntec
1	R5	66.5kohm	Chip Resistor	0402	Cyntec
1	R6	49.9kohm	Chip Resistor	0402	Cyntec
1	R7	31.6kohm	Chip Resistor	0402	Cyntec
1	R8	22.1kohm	Chip Resistor	0402	Cyntec
1	R9	0ohm	Chip Resistor	0402	Cyntec
1	J1	-	jumper connector	-	-

REVISION HISTORY

Date	Revision	Changes
2020.06.08	01	Release the preliminary specification.
2020.10.13	02	Update Output Current 1A to 1.2A

Mouser Electronics

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