# Dual Channel Fixed Voltage ULDO Linear Regulator

## LM2C1117

### **FEATURES**

- Dual Channel Ultra Low Dropout Voltage
- Master (Channel 1) Slave (Channel 2) Configuration
- · Compatible with low ESR MLCC as Input / Output Capacitor
- · Guaranteed Output Current of 600 / 600mA
- Available in SOP8 and SOP8-PP
- Fixed Output Voltage: 1.0V ~ 3.6V
- Over-Temperature Protection
- Over-Current Protection

#### **APPLICATION**

- LCD TVs and SETTOP Boxes
- Battery Powered Equipment
- Motherboards and Graphic Cards
- Microprocessor Power Supplies
- Peripheral Cards
- · High Efficiency Linear Regulators
- Battery Chargers

### DESCRIPTION

The LM2C1117 is a dual channel ultra low-dropout voltage regulator capable of sourcing 0.6A per channel with low dropout voltage and operates from 2.5V to 5.5V input supply. The device is designed to have a fast transient response and is stable with  $1\mu$ F low ESR capacitor. It is available in fixed output-voltage variants from 1.0V to 3.6V for each channel.

The LM2C1117 features master and slave configuration. Channel 1 is the master channel and generates reference voltage. Channel 2 is the slave channel and uses reference voltage generated from channel 1. To operate channel 2, channel 1 must be turned on.

#### **ABSOLUTE MAXIMUM RATINGS**

CHARACTERISTIC	SYMBOL	MIN.	MAX.	UNIT
Input Supply Voltage (Survival)	VIN1, VIN2	-	6.5	V
Enable Input Voltage (Survival)	V <sub>EN1</sub> , V <sub>EN2</sub>	-	6.5	V
Maximum Continuous Output Current	IMAX	-	600 / 600	mA
Lead Temperature	Tsol		260	°C
Storage Temperature Range	Tstg	-65	150	°C
Operating Junction Temperature Range	TJOPR	-40	125	°C
Package Thermal Peristance *	ΘJA-SOP8-PP	68		°C/W
rackage memiai resisiance	OJC-SOP8-PP	15		

\* Calculated from package in still air, mounted to 2.6mm X 3.5mm(minimum foot print) 2 layer PCB without thermal vias per JESD51 standards.



#### ORDERING INFORMATION

Device	Package
LM2C1117GD-XXYY	SOP8
LM2C1117GDP-XXYY	SOP8-PP

XX : Output Voltage Code of Channel 1 (VOUT1)

YY : Output Voltage Code of Channel 2 (VOUT2)

Please contact us for more information about this product.

# Package Dimension

### SOP-8 & SOP-8PP



STWBOL	Min	Max	Min	Max
A	1.350	1.750	0.053	0.069
A1 (for SOP-8)	0.100	0.250	0.004	0.010
A1 (for SOP-8PP)	0.050	0.150	0.004	0.010
A2	1.350	1.550	0.053	0.061
b	0.330	0.510	0.013	0.020
С	0.170	0.250	0.006	0.010
D	4.700	5.100	0.185	0.200
D1 (for SOP-8PP)	3.202	3.402	0.126	0.134
E	3.800	4.000	0.150	0.157
E1	5.800	6.200	0.228	0.244
E2 (for SOP-8PP)	2.313	2.513	0.091	0.099
е	1.270(BSC)		0.050(BSC)	
L	0.400	1.270	0.016	0.050
Θ	0°C	3°8		
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