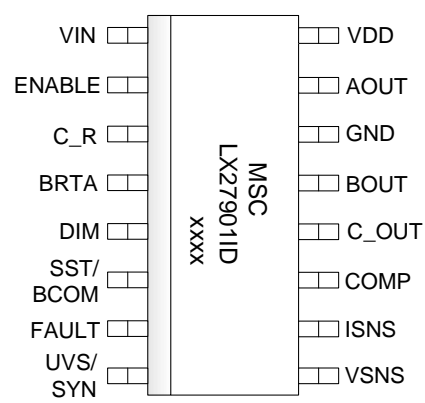


**IMPORTANT:** For the most current data, consult MICROSEMI's website: <http://www.microsemi.com>

PACKAGE ORDER INFO		THERMAL DATA
$T_A$ (°C)	<b>D</b> Plastic SOIC 16 Pin	$\theta_{JA} = 82.2$ °C/W
	RoHS Compliant / Pb-free	THERMAL RESISTANCE-JUNCTION TO AMBIENT
-40 to +85	<b>LX27901ID</b>	Junction Temperature Calculation: $T_J = T_A + (P_D \times \theta_{JA})$ . The $\theta_{JA}$ numbers are guidelines for the thermal performance of the device/pc-board system. All of the above assume no ambient airflow. $\theta_{JA}$ number above is with 4-layer pcb board.
Note: Available in Tape & Reel. Append the letters "TR" to the part number. (i.e. LX27901ID-TR)		

ABSOLUTE MAXIMUM RATINGS	PACKAGE PIN OUT
Supply Input Voltage, VIN .....0.3V to 36V Signal Outputs, VDD, AOUT, BOUT, C_OUT.....-0.3V to 6.5V Signal Inputs, C_R, BRTA .....-0.3V to VDD+0.3V Signal Inputs, ENABLE, DIM, ISNS, VSNS, UVS/SYN .....-0.3V to VDD+0.3V Signal Outputs COMP, SST/BCOM, FAULT .....-0.3V to VDD Maximum Junction Temperature ..... 150°C Storage Temperature Range.....-65°C to 150°C Peak Package Solder Reflow Temperature (40 seconds maximum exposure)..... 260°C Lead Temperature. (Soldering 10 seconds)..... 300°C	 <p style="text-align: center;"><b>LX27901ID</b> <b>D PACKAGE</b> (Top View) RoHS / Pb-free Matte Tin Pin Finish</p>
Notes: Exceeding these ratings could cause damage to the device. All voltages are with respect to GND. Currents are positive into, negative out of specified terminal. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated under "Recommended Operating Conditions" are not implied. Exposure to "Absolute Maximum Ratings" for extended periods may affect device reliability.	

ELECTRICAL CHARACTERISTICS						
Unless otherwise listed, the following specifications apply over the operating ambient temperature of $-40^{\circ}\text{C} < \text{Temp} < 85^{\circ}\text{C}$ , and $V_{IN} = 7.5\text{V to } 27\text{V}$ , except where otherwise noted and the following test conditions: $V_{IN} = 12\text{V}$ , $C_{C,R} = 330\text{pF}$ , $R_{C,R} = 15\text{K}$						
Parameters	Symbol	Test Conditions/Comments	MIN	TYP	MAX	Units
<b>Power</b>						
Controller Input Voltage	VIN		7.5		27	V
Controller Operating Voltage	VDD	1 $\mu\text{F}$ bypass cap on VDD pin, $I_{VDD} = 0$ to 5mA	5.0	5.25	5.5	V
Power Supply Input Current	IIN	AOUT, BOUT = no load, VDD = no load		7	10	mA
Sleep Mode Current	IDD <sub>SLEEP</sub>	VIN = 24V, $V_{ENABLE} < 0.8\text{V}$		200	400	$\mu\text{A}$
VDD Off Voltage		ENABLE < 0.8V		0.1		V
<b>Enable</b>						
ENABLE On	EN <sub>H</sub>		1.7			V