

Design Note

UC1525B/UC1527B DEVICES
 Comparison Summary to UC1525A/27A Devices

The UC1525B and UC1527B devices are enhanced versions of the previous generation of UC1525A and UC1527A devices. They are pin-for-pin compatible and direct replacements for the "A" versions in

almost all applications. Significant improvements have been made in the 5.1 V reference voltage and the output drivers as itemized in the tables below.

PARAMETER	NEW: UC1515B/27B	OLD: UC1525A/27A
REFERENCE VOLTAGE		
V_{REF} (min)	5.062 V	5.05 v
V_{REF} (max)	5.138 V	5.15 v
Line Regulation (max)	+/- 10 mV	+/-20 mV
Load Regulation (max)	+/-15 mV	+/-50 mV
Temperature Stability (max)	+/-30 mV	+/-50 mV
Total Output Variation (max)	5.036 V to 5.164 V	5.00 V to 5.20V
Long Term Stability (max)	+/-10 mV	+/-50 mV
Temperature Coefficient (typ)	8 ppm/deg. C	
PWM OUTPUT SECTION		
Minimum On-Time (typ)	350 nS	600 nS
Cross Conduction	30 nC	150 nC
SUPPLY CURRENT		
ICC Increase (40 kHz to 400 kHz)	15 mA (max)	40 mA (typ)
ESD PROTECTION		
Discharge Withstand Voltage (typ)	2 kV (typ all pins)	no protection