SL869 GPS/Glonass module compatibility with SL868



SL868 GPS Standalone	SL869 GPS/Glonass Standalone			
MAIN FEATURES:	MAIN FEATURES:			
SiRF Star IV – 48 channel GPS core	Multi GNSS Receiver			
24-pad LCC package	GPS/Galileo/QZSS + Glonass			
Size: 16 x 12.2 x 2.3 mm	24-pad LCC package			
Sensitivity:	Size: 16 x 12.2 x 2.3 mm			
 Acquisition -148 dBm 	Supply voltage 2.85 – 3.6V			
 Tracking -163 dBm 	UART Interface			
Supply voltage 2.85 – 3.6V	Sensitivity:			
Hot Start < 1s, cold start < 35s	 Acquisition -146 dBm 			
Power consumption:	 Tracking -162 dBm 			
<40 uA @ Hibernate mode	Assisted GPS (InstantFix)			
 10 mA @ Trickle power more 	Local / Server Ephemeris predictions			
 32 mA @ Navigation 	Embedded Flash Memory			
Temperature range : -40 to +85°C	Internal LNA, Jamming Remover			
Interfaces: UART, I2C (for MEMS only)	Low Power Modes			
Internal LNA, Jamming Remover	PPS signal			
Assisted GPS (InstantFix)	Temperature range : -40 to +85°C			
PPS signal				
SBAS: WAAS, EGNOS, MSAS, GAGAN				

SL869 pinout

24 GND 23 VCC_IN 22 VBATT 21 RX 20 TX 19 SCL2 18 SDA2 17 NC 15 NC 13 GND	J-N3 (SL868)	NC 2 NC 3 1PPS 4 EXT_INT 5 NC 6 NC 6 NC 7 BOOT 7 BOOT 7 NC 9 VCC_IN 9 VCC_IN 10 GND 11 RF_IN 12	24 23 22 21 20 19 18 17 16 15 14 13	GND VCC_IN VBATT RX0 TX0 SCL2 SDA2 NC NC RX2 TX2/BOOT GND	SL869	NC/RES NC/RES NC NC/RES NC/RES NC/RES NC/RES NC VCC_IN GND RF_IN GND	1 2 3 4 5 6 7 8 9 10 11 12
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Main difference between SL868 and SL869 is Glonass System capability available at SL869.

SL869 is Pin2Pin compatible with J-N3 (SL868) family product. The only difference is BOOT pin location at SL869 module. If the customer does not need to reprogram module then this is not an issue at all.

<u>Conclusion:</u> customer that made design for SL868 GPS module can switch to SL869 a GPS/Glonass/Galileo module with no need for redesign.