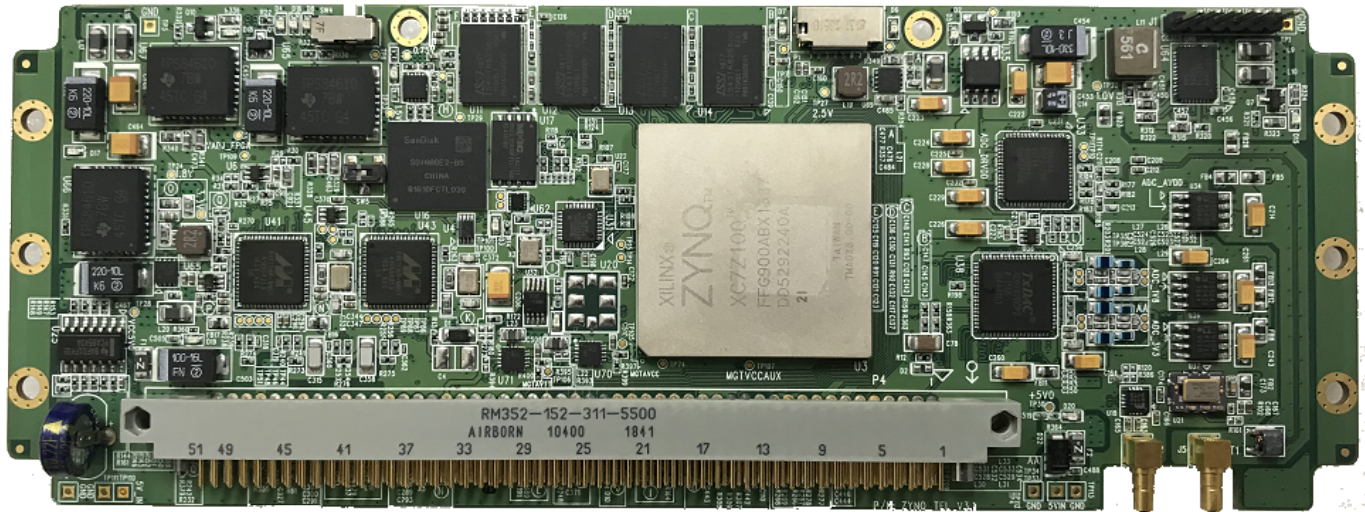




高速訊號基頻模組

P/N: ZYNQ_TELV3.1



ZYNQ_TEL V3.1 is designed for communication equipment as signal processing and control application. This module builds with Xilinx Zynq-7000 series SOC chip and high speed ADC & DAC which has excellent wideband and narrowband spurious-free dynamic range. It features precise clock generation, adjustable I/O voltage, watchdog timer, 2 channels of 250MSPS analog input and output.

Specifications

- Xilinx XC7Z100-2FFG900I FPGA Main Processor
- 33.333MHz $\pm 1\%$ of PS System Clock Rate
- VCTXO 20MHz Programmable Reference Clock
- FPGA External Reference Clock / Local Clock Input Switchable
- 1GB DDR3 Component Memory for PS
- 8GB EMMC Memory
- Micro SD Slot with 8GB Card * 1
- 256Mbit QSPI Flash Memory * 1
- Analog Device AD9747 BCPZ 16-bit 250MSPS DAC * 1
- Analog Device AD9643 BCPZ-250 14-bit 250MSPS ADC * 1 with $\leq -92\text{dBm}$ Noise Level
- ADC and DAC Reference Clock Input Direct From FPGA
- Male SSMB Connector for ADC Signal Input
- 3 Bank of Adjust Voltage (1.8/2.5/3.3V) I/O Pins, default is 3.3V
- 64K Bytes of EEPROM Memory
- Programmable Watch Dog Timer, 1sec Default with External Power to RTC
- FPGA JTAG Port * 1
- UART Interface Port * 3
- Ethernet (10/100) Interface (I/O Connector) * 2
- USB 2.0 Interface (I/O Connector) * 1
- SMD 0603 LED Indicator * 6 (Power x 1, GPIO x 4, FPGA Done x 1)
- Male SSMB External Reference Clock Input * 1
- System Reset from I/O Connector * 1
- Single +5V $\pm 0.5\text{V}$ DC Power Input
- Total 152 Pin User I/O Connector
- 181(W) x 67.6(D) mm $\pm 2\text{mm}$ Board Size

FPGA Block Diagram

