

TRIPLE-CHANNEL DIGITAL RECEIVER

Areas of Application

The digital receiver performs analog to digital and digital to analog conversions, preprocessing of wideband signals. It can be used in radars, communications, electronic countermeasure and for high-resolution image acquisition and processing

Specification

Number of ADC channels	3
Input signal bandwidth for ADC channels	
1 channel	400 MHz
2 channels	125 MHz each
Number of DAC channels	1
Frequency bandwidth for DAC channel, MHz	400
Bit capacity 800 MHz ADC, bit	11.2
Bit capacity 250 MHz ADC, bit	6.2
Reconfiguration time for digital receiver, ms	400
Interfaces	2 × RS422, Ethernet 100 Mbit, 20 LVDS GPIO, 28 CMOS GPIO
Memory	2 × 4 MByte, 36 bit QDR SRAM, banks at 250 MHz; 32 kByte FRAM
Dimensions, mm ³	160 × 100 × 22
Weight, g	170
Power consumption, W	25
Operation temperature range, °C	-40...+85



Advantages

Real-time processing of wideband signals with a bandwidth up to 400 MHz; fast reconfiguration of operating mode; low jitter clock sources for ADCs and DAC are in the digital receiver; signal acquisition and processing for similar digital receivers can be synchronized to create multichannel systems

IPR Protection

IPR1

Stage of Development.

Suggestions for Commercialization

IRL8, TRL7

Manufacture, delivery, warranty service, and staff training, upon request

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