







## MODEM CARD - ICS-3UV-MDMC01

## **DESCRIPTION:**

The MODEM card is developed around Zynq Ultra Scale FPGA. The signal processor is designed on Single Board Computer architecture with high end processors and onboard ADC, DAC and high-end FPGAs. The signal processor of transponder shall be configured with feature of DPSK and MSK demodulation in addition to the conventional pulse amplitude demodulation. It has 4 lane PCI interface along with ARINC-429 and MIL-1553 interface



## **FEATURES:**

- Zynq Ultra scale+ Mpsoc FPGA
- VPX Interface form factor
- High speed ADC Interface
- JESD204B Std
- ARINC-429 Interface
- MIL-1553 Interface

## **SPECIFICATIONS:**

Processor : Zynq Ultra scale+ Mpsoc FPGA

• RAM Memory : 4GByte DDR3/4

• Flash : 128Mbyte Quad-SPI and 16GB iNAND

• Ethernet Port : x2 Giga Ethernet Back plane VPX

x1 Giga Ethernet with RJ45

• Temperature sensor :I2C temperature sensor

• Watchdog timer : Time out of 10 sec

Operating system : Peta Linux or Bare Metal OS for Xilinx

• MIL 1553B Interface : 2 Channels (01 + 01 redundant)

• ARINC 429 Interface : 4 Channels (4 TX, 4 RX)

• ETHERNET Interface 10/100/1000

• PCI Interface 4-lane

• DDR4 Memory Interface

Form Factor (Size)

• SD Card Interfaces

eMMC NAND

• LNA, Switches, Filters and Digital Step Attenuators

• Analog to Digital Converter : 16-bit ADC's ,4GSPS

• Operating temperature :  $-40^{\circ}$ C to  $+125^{\circ}$ C

• Storage temperature : -55°C to +125°C

• Power supply : +9V to + 32 from VPX

: 3U VPX Customized

• Cooling : Conduction Cooled

APPLICATIONS: Secondary Surveillance RADAR