

Antenna Head Unit Controller

PRODUCT DESCRIPTION

Antenna Head Unit Controller is conduction cooled board in custom form factor which receives digital information and generates control signals. The onboard FPGA is used to drive multiple input/output interfaces.

The board generates control signals required for controlling the antenna. This board also receives signals from the antenna and does processing of the received signals. The board is used in transducer interfacing for defense systems. The board has redundant Ethernet and redundant SFP interfaces for external world communication.

KEY FEATURES

- FPGA based algorithm processing
- Generates control signal required for the antenna
- Data processing on TTL signals obtained from transducers
- Remote monitoring
- Onboard configuration memory for FPGA auto programming at power-ON
- RTL ported on the board to function as ATE for other boards



SPECIFICATIONS

FPGAs / Processor

- Xilinx Virtex-5 FX200T FPGA with PowerPC440 Embedded Processor

Interfaces

- 466 TTL IOs over Micro-D connectors
- Two optical interfaces
- RS232
- 2 Gigabit Ethernet
- GPIO

Software / IP

- Uboot and Linux-2.6.39
- Application software supports
 - Handling of packets from DMC and SCD interfaces on Ethernet lines
 - Upgrade of flash images of U-boot, linux, application, DTB file, HB Flash data, LB Flash data

Additional Information

- DDR2 64 MB
- Flash 32 MB

MECHANICAL

- Conduction cooled board in custom form factor
- The board weighs 1.22 kg

POWER CONSUMPTION

- The unit consumes < 40W
- Input voltage is 5V

ENVIRONMENTAL

- Temperature range : -20°C and +70°C (Storage)
-10°C and +55°C (Operational)

PART NUMBER[S]

CB10P0	Antenna Head Unit Controller
--------	------------------------------

