

Array Interface Board

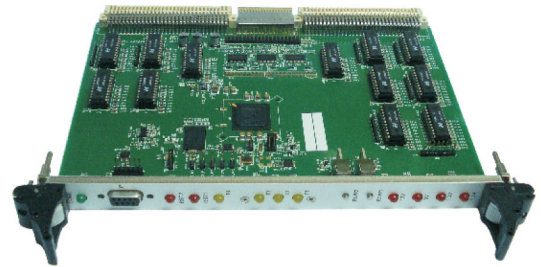
PRODUCT DESCRIPTION

The Array interface board is 6U board in VME form factor which has an onboard FPGA. The board is used in interfacing with the antenna array in radar systems. The board is used for implementation of complex signal processing algorithms on FPGA. The board receives input signals and based on the command it decodes and generates signals for each element in the antenna array.

It is an integral part of Beam Steering Unit (BSU), which does the necessary computation and directs the beam in the desired direction.

KEY FEATURES

- Xilinx Spartan 6 LX150 FPGA
- 87 lines of 12V CMOS output interfaces
- 16 lines of TTL input interfaces
- 64Mb SPI Flash and 32MByte Xilinx Platform Flash
- User configurable front panel LED status indicators
- FPGA auto configuration at power-ON from onboard memory
- Onboard voltage regulators for generating DC voltages from VME power supply
- Voltage monitor circuit for board health monitoring



SPECIFICATIONS

FPGAs / Processor

- Xilinx Spartan-6 LX150 FPGA

Interfaces

- JTAG interface to FPGA and PROM FLASH
- User configurable front panel LED status indicators
- 87 lines of 12V CMOS output interfaces
- 16 lines of TTL input interfaces
- Two mini push button switches

Software / IP

- Software & RTL for board validation
 - Built-in self test

Additional Information

- User selectable (BOM option) configuration memory
 - 32 MByte Xilinx Platform Flash
 - 64 Mb SPI Flash
- 4 MHz Oscillator for FPGA logic

MECHANICAL

- 6U air cooled VME board
- The board weighs 410 grams

POWER CONSUMPTION

- The unit consumes 14W
- Input voltage 12V, 3.3V, 5V available from standard VME backplane

ENVIRONMENTAL

- Qualification : Pre Thermal vibration, thermal cycling and post thermal vibration test
- Temperature range : -30°C and +70°C (Storage)
-10°C and +55°C (Operational)

PART NUMBER(S)

CH1060	Array Interface Board
--------	-----------------------

