



ARION-100 Connection Boards

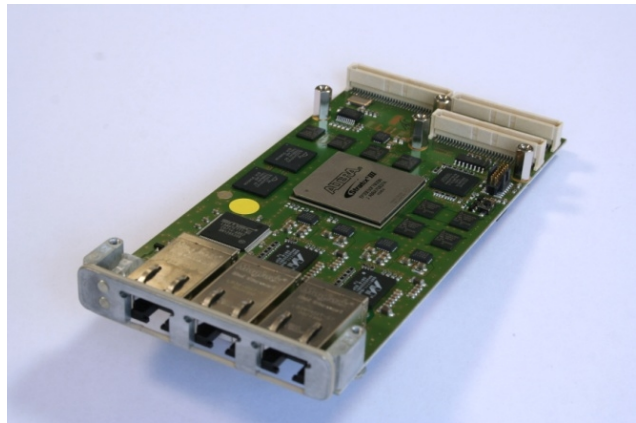
Arion-IO
Technical
specification

Description

The Arion-100 connection boards, based on a classical Ethernet link, allow to distribute data between equipments in a deterministic and real-time way with data integrity and synchronisation mechanisms. The boards are in industrial temperature range and are available in PCI or PMC format :

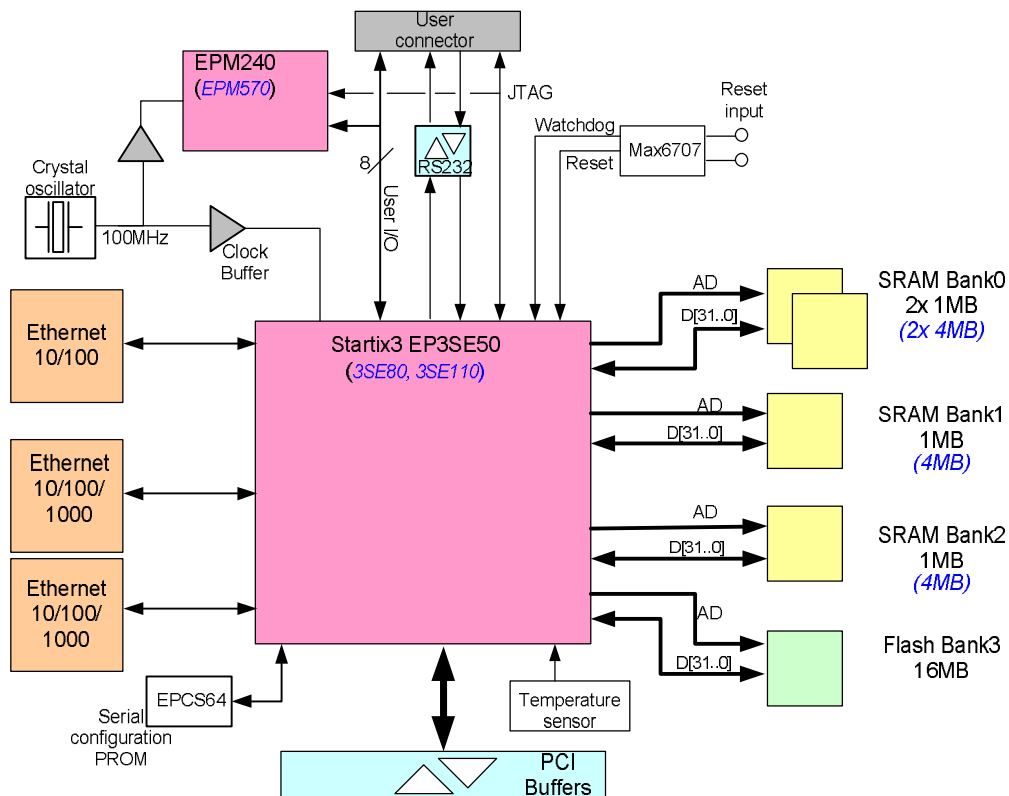
§ Réf : PCI-Arion100 6020-0608-1

§ Réf : PMC-Arion100 6020-0608-1



This board is based on high performance FPGA technology (Altera stratix3), its includes 3 Ethernet connectors for 10/100/1000Mb functionality and a 32bit data path with 33MHz Master/Target PCI interfacing.

Block Diagram





Main features

§ **FPGA**

- Altera Stratix III EP3SE50 (EP3SE80, EP3SE110 capability) FineLine BGA Package with at least 480 user IOs
- Altera low power CPLD EPM240 (570 capability)
- EPCS64 serial PROM configuration

§ **Clocking**

- 100MHz crystal oscillator

§ **Memory**

- **SRAM** : 3 separated Memory banks
 - § Bank0 : 2Mbytes / 32bits data path (8Mbytes capability)
 - § Bank1 : 1Mbytes / 32bits data path (4Mbytes capability)
 - § Bank2 : 1Mbytes / 32bits data path (4Mbytes capability)
- **FLASH**
 - § Bank3 : 16Mbytes / 32bits

§ **Ethernet:**

- **10/100** : 1 port with LAN91C111 MAC component
- **10/100/1000** : 2 ports with 88E1111 (physical layer)

§ **User interface**

- **User connector** for :
 - § RS232 RX/TX1 interface
 - § JTAG port
 - § 8bits user I/O connected to STRATIX and/or EPM component
- **2 Dual-color User LEDS**
- **Temperature sensor**
- **Connection for Reset push button**
- **Watchdog** (MAX670)

§ **Temperature range**

- **Industrial range** : -40°C / +85°C

§ **Power supply**

- < 5W with Ethernet links active

§ **Weight**

- 125 g