

## ARION-100

### Connection Boards

Arion-IO  
Technical  
specification

#### Description

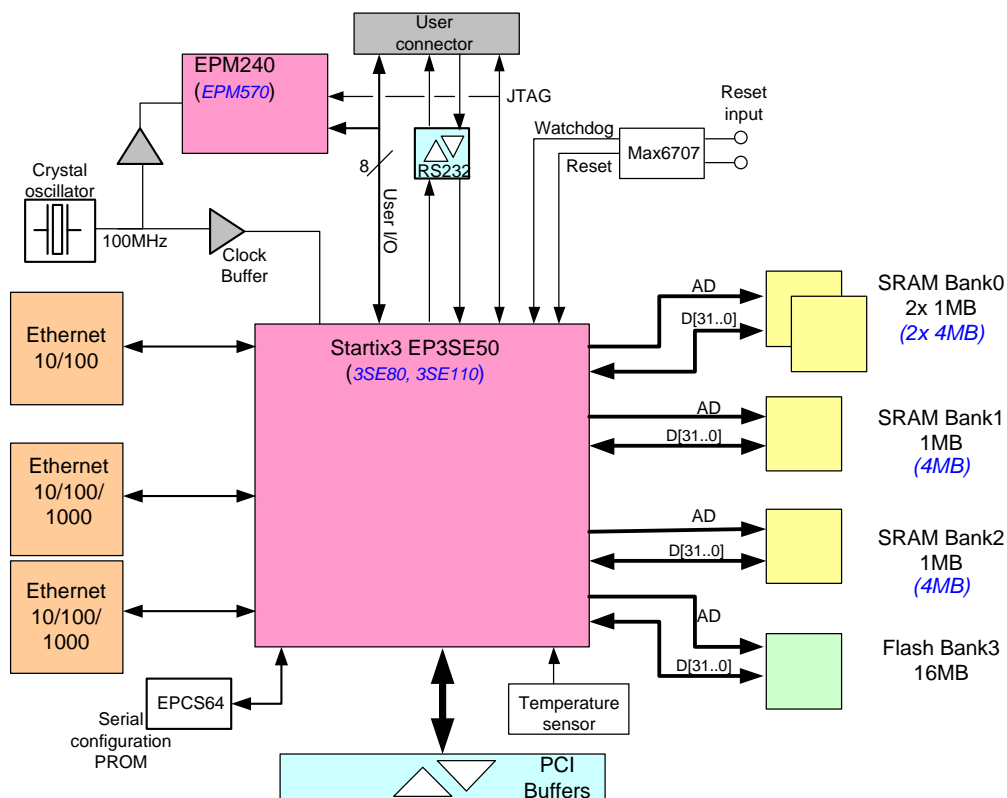
The Arion-100 connection boards, based on a classical Ethernet link, allow to distribute data between equipments in a deterministic and real-time way with data integrity and synchronisation mechanisms. The boards are in industrial temperature range and are available in PCI or PMC format :

- 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



- **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

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