

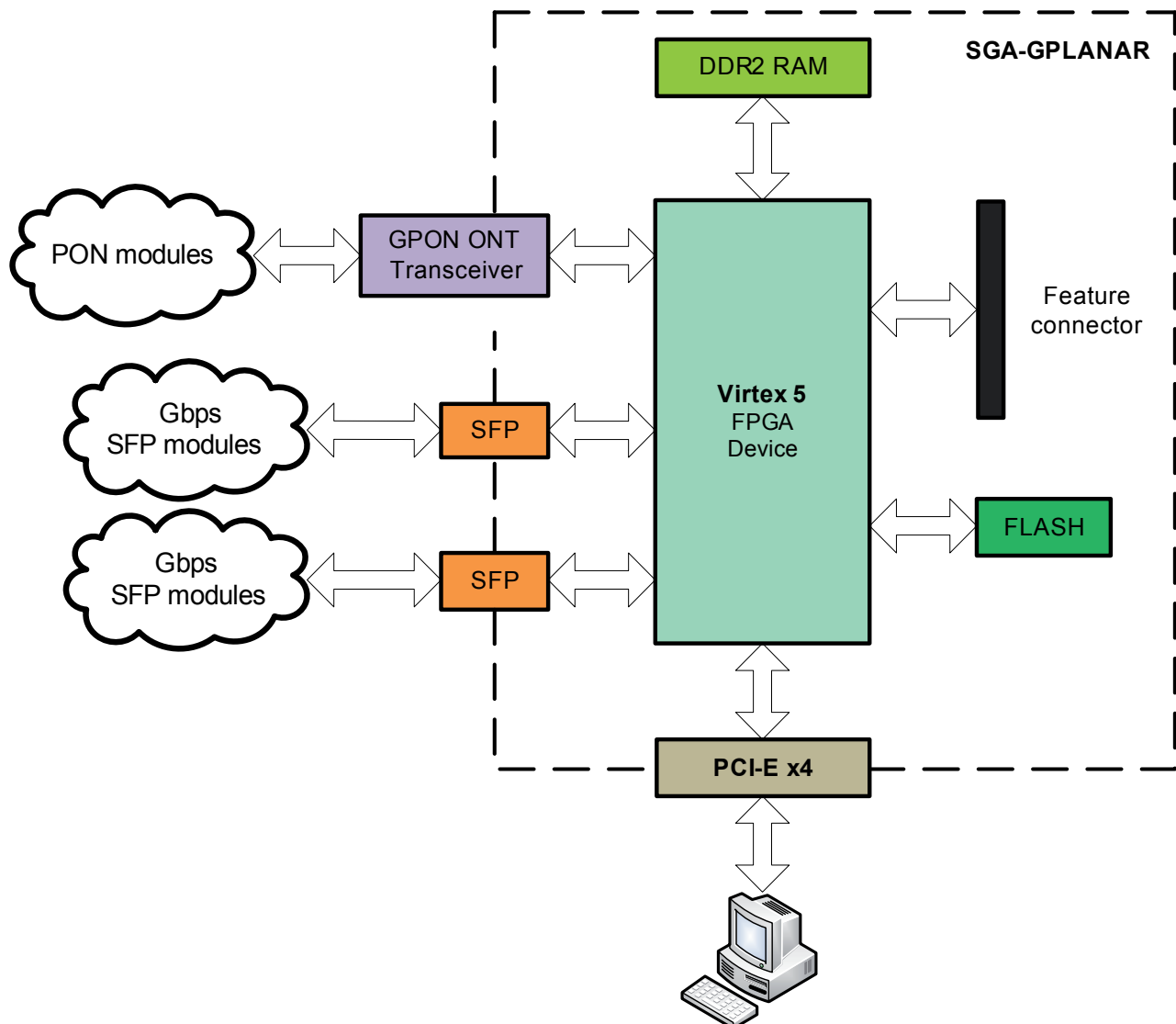
# AITIA International

## SGA-GPLANAR Interface card

**Customize.Connect.Co-operate.**

The GPLANAR card provides the highest connectivity amongst AITIA interface cards. Its 2 SFP slots supporting both Gigabit optical or Ethernet coupling and dedicated GPON interface make GPLANAR a real all-round, high speed device that can monitor a wide range of networks. The cards can also be customized by clients: two types of core FPGAs and two types of OLTs can be ordered to satisfy all customer needs. These features ensure that GPLANAR offers a fast, widely configurable network monitoring solution optimized to user demands.

### GPLANARchitecture



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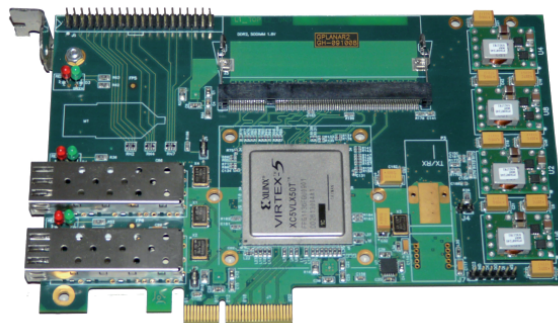
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## SGA-GPLANAR Interface card

### Technological Description

Built-in FPGA components:

- 1 PCI Express Endpoint Controller
- 2 Tri-mode (10/100/1000) Ethernet Media Access Controller (MAC)
- 2 Internal Configuration Access Ports (ICAP)



SGA-GPLANAR components:

- PCI Express endpoint connector with 100 MHz reference clock driving x1 and x4 Gigabit lanes at 2.5 Gbps each
- Dual SFPs to support user-installed Gbps Ethernet and STM-1 to STM-16 modules with 125 and 155.52 MHz reference clocks
- GPON ONT Transceiver with 155.52 MHz clock reference
- 200-pin, small-outline dual in-line DDR2 SODIMM memory module receptacle accommodating 128MB, 256MB or 512 MB modules
- 40 pin BERG type Feature Connector
- Xilinx PROM FLASH Platform to reconfigure FPGA

Four GPLANAR models are available depending on the chosen FPGA chip and the insertion of an OLT transceiver. AITIA's top scale model includes Xilinx Virtex 5 FPGA with 5.32 Mbytes of Block RAM and 64 DSP slices.

### Applications

- Monitoring of GPON networks and/or high speed Ethernet networks
- Lossless packet processing, filtering and forwarding in optical or Ethernet networks
- Real-time protocol analysis

### Features

- 64 bit Timestamp with 4 or 8 nsec resolution
- Header-only capture: configurable protocol layer depth decoded by hardware on the fly
- Fully PCAP/WINPCAP compliant interface (e.g. wireshark integration)
- Parameterized line speed capable packet/flow generator for active measurements



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