# 🔝 AVAL GLOBAL

## Embedded Solution

Development of embedded industrial products suitable for customers



## APX-AA10L1

PCI Express Compatible FPGA accelerator Board

- > Arria10 GX with 1152 pin package
- Two optical modules of 40 Gbps are installed to realize high-speed data communication
- Two systems of DDR4 SDRAM memory (72 bits with ECC) as the shared memory
- > FPGA heat sink with fan for air cooling is installed
- Low profile size that can be incorporated into Rack mountable equipment
- > PCI-Express 3.0 Gen 3 (8 Gbps) × 8 lane supported

Model	APX-AA10L1-XX	
FPGA	FPGA Arria 10 series (Intel) × 1	
Serial ROM	Serial ROM	EPCQL 1024 × 1 piece
Local memory	DDR4 SDRAM	4 GByte (Separately for ECC use) 1200 MHz (DDR 4 – 2400)
	DDR4 SDRAM	4 GByte (Separately for ECC use) 1200 MHz (DDR 4 – 2400)
	EEPROM	M24C02 – RDW6TP (can be used arbitrarily)
communication	Optical communication	40 Gbps QSFP + optical module (AVAGO) × 2 ch
External bus	PCI Express	PCI Express 3.0 (Gen3) 8GT / S × 8
System monitoring	Voltage monitoring	+ 12V power supply voltage monitoring, reset signal generation
	Temperature monitoring	Temperature sensor

#### Specifications

Power supply	Voltage: +12 V $\pm$ 10% Current: 5.5 A (1.1 A $\times$ 5 pins from the PCI standard)	
External dimensions (substrate)	PCI-Express LowProfile	
usage environment	Temperature: 0 ° C to + 40 ° C (FPGA forced air cooling) Humidity: 30% to 90% (non-condensing)	
Environmental response	RoHS	

Notes)

- The specifications and appearance stated are subject to change without notice.

- Power consumption does not include inrush current.

- In order to use the product correctly, be sure to read the instruction manual before using the product. Also, use the product under the conditions applicable to your product warranty.

Panel

Arria 10 series

Construction example

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