

# LSIOA01-1 IO adapter module

Gigabit Ethernet 1000BASE-T Specification compliance

## ■ Summary



\* Major function : Giga-bit Ethernet-LVDS communication bridge

\* Module ambient temperature : -5 to 60°C

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## ■ Specifications

ITEM		SPECIFICATION
Function		I/O module communication (LVDS) Giga-bit Ethernet ring communication
Communication rate (LVDS)		100 Mbps
Number of D-Ring addressing node		Maximum 96 node
EEPROM		2 kbit (For initial setting information of MAC address)
Ethernet interface	For D-Ring	1000BASE-T : 2
User interface		Micro SD card : 1
		Control/standby switch : 1
		Reset switch : 1
		USB mini-B : 1
Controller		Spartan6 XC6SLX100
Self-diagnostic functions		Clock abnormal check CRC check (FPGA) Memory check Power voltage check Configuration check
Data check method		CRC32
Indicator		4: PWR(Power) / STS(Status) / MOD(Mode) / ACC(Access)
Hot swap		Possible
Power supply		DC 24 V $\pm$ 20%/typ 0.24A (The voltage supplied from the backplane)
Environmental conditions	Module ambient temperature	(Operating) -5 to 60°C (Storage) -40 to 85°C
	Module ambient humidity	(Operating / Storage) 10 to 95% RH (No condensation)
Vibration		3.5 mm @5 to 8.4 Hz 1 G @8.4 to 150 Hz
Shock		15 G 11 ms 0.5 J $\pm$ 0.04 J
Rated Current		305 mA
Weight		0.18 kg
Dimensions		111 mm (D) x 117 mm (H) x 46 mm (W) (Except projection)
Standard/Directive		EN 61131-2:2007, RoHS

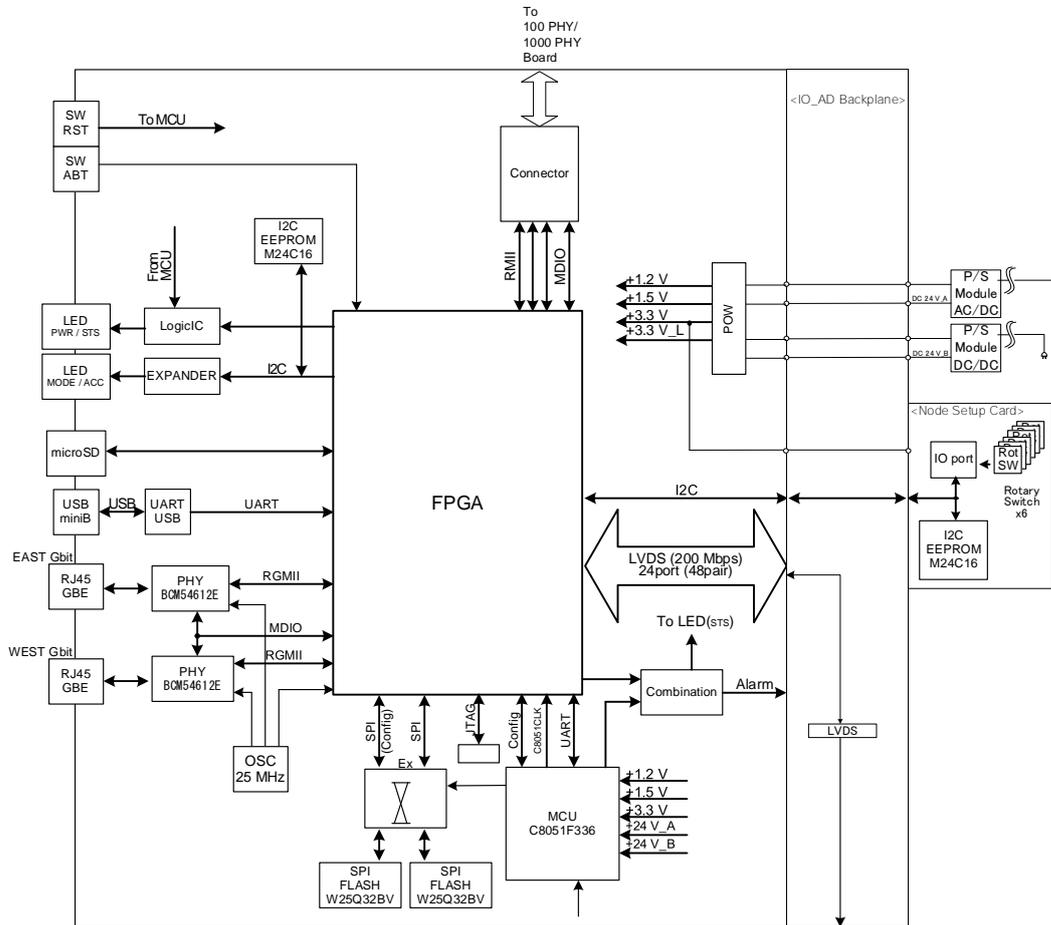
About compliant module type

For compliant modules of this product, please refer to "Compliant backplane list (CGS-S9901-E-XX)".

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## ■ Block diagram



P/S	:	Power Supply
IO_AD	:	Input/Output Adapter
LVDS	:	Low Voltage Differential Signaling
FPGA	:	Field Programmable Gate Array
MCU	:	Micro controller Unit
Flash	:	Flash memory
CLK	:	Clock Oscillator
OSC	:	Oscillator
RST	:	Reset
LED	:	Light Emitting Diode
ABO	:	Abort
PWR	:	Power
STS	:	Status
GBE	:	Giga bit Ether
UART	:	Universal Asynchronous Receiver Transmitter
EEPROM	:	Electrically Erasable Programmable Read-Only Memory
SPI	:	Serial Peripheral Interface
DDR3	:	Double Data Rate3
I2C	:	Inter-Integrated Circuit
JTAG	:	Joint Test Action Group

When using, please read the instruction manual attached to the product carefully and use it properly.

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