

# LSIOS01-1 I/O scanner card

Gigabit Ether 1000BASE-T specification compliant

## ■ Summary



\*Main function : GbE-LVDS communication bridge

\*Operating ambient temperature range : -5 to 60°C

\*User interfaces

- Ethernet (1000BASE-T) : 2 in total
- USB mini-B connector : 1 in total
- Switches : 2 in total
  - Reset switch
  - Abort switch

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## ■ Specification

ITEM		SPECIFICATION
Function		LVDS input-output communication Giga-bit Ethernet ring communication
Communication rate (LVDS)		100 Mbps
Number of addressing nodes		Max 96 nodes
EEPROM		2 kbit (For initial setting information of MAC address)
Ethernet interface		1000BASE-T : 2
Serial interface		USB Serial (USB miniB connector) : 1
User interface		Abort switch : 1 Reset switch : 1
Controller		Spartan7
Self diagnosis		Clock abnormal check CRC check (FPGA) Memory check Power voltage check Configuration check
Data check method		CRC32
Indications		4: Power / Status / Mode / Access
Hot-swapping		Supported (*Note that emergency stop signal processing must be handled by user circuitry)
Rated voltage		DC 24 V $\pm$ 20% (Supplied from backplane)
Environmental conditions	Module ambient temperature	(Operating) -5 to 60°C (Storage) -40 to 85°C
	Module ambient humidity	(Operating / Storage) 95% RH or less (No condensation)
Vibration		3.5 mm at 5 to 8.4 Hz, 1 G at 8.4 to 150 Hz
Shock		15 G 11 ms
Rated Current		244 mA
Weight		270 g or less
Size		112 mm (D) x 177.8 mm (H) x 25.8 mm (W) (Except projection)
Standard/Directive		EN 61131-2:2007, RoHS

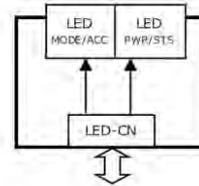
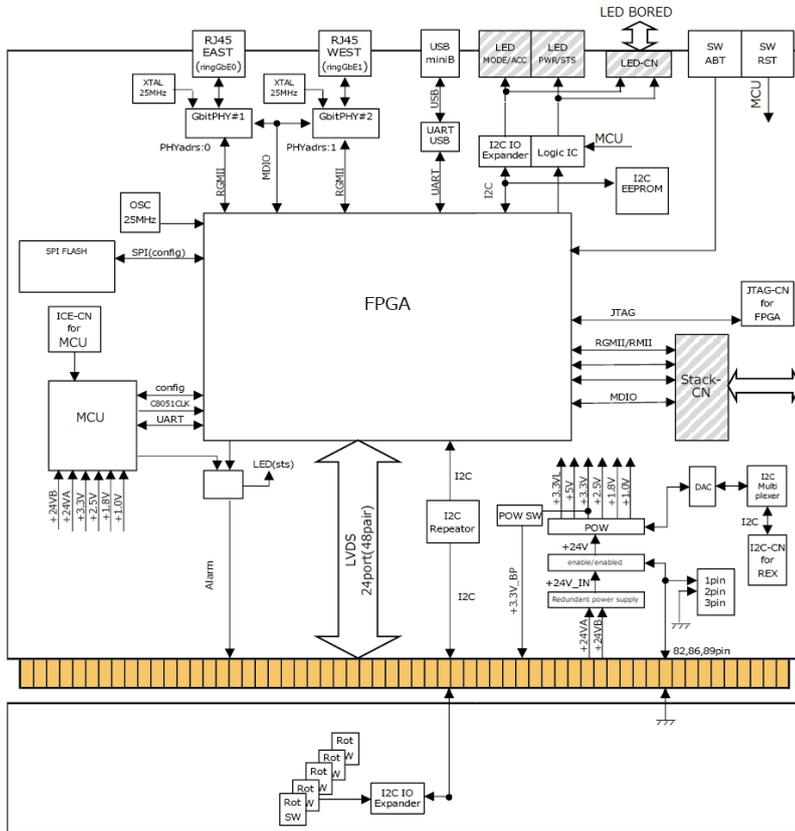
About compliant module type

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
POW	:	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
SW	:	Switch
PHY	:	Physical layer

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

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