

LSIOS01 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
 - Micro SD slots : 1 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 | Micro SD card | : 1 |
| | Abort switch | : 1 |
| | Reset switch | : 1 |
| Controller | | Xilinx Spartan6 |
| 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) Less than 95% RH (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 |
| Current consumption | | 272 mA |
| Weight | | 240 g or less |
| Size | | 112 mm (D) x 177.8 mm (H) x 25.8 mm (W) (Except projection) |
| Standard/Directive | | IEC61131-2:2007, RoHS |

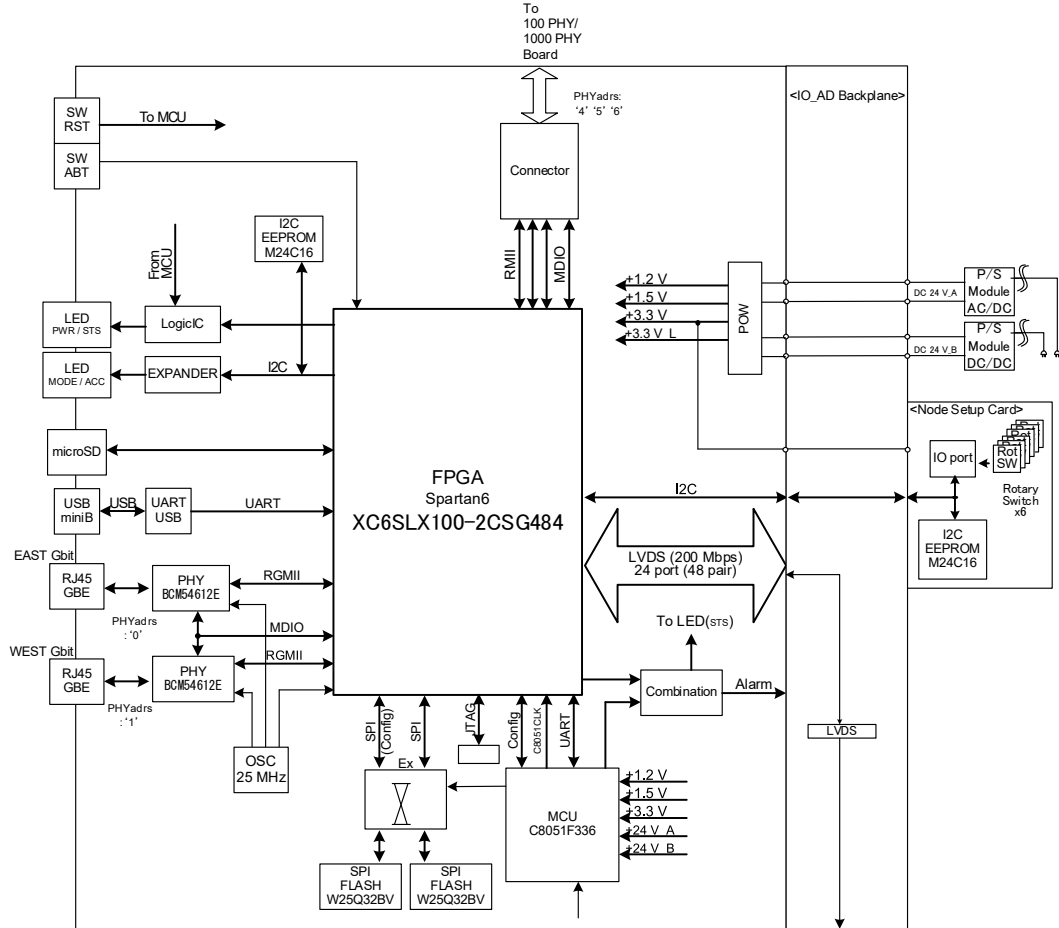
*About compliant module type

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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