LSDOM03 DO module

LS communication Digital outputs : 16

■Summary

＊Number of outputs	:	16(16ch common isolation)
＊Contact	:	Dry / A contact(Normally Open)
＊Contact method	:	Open collector Sink output (Minus common)
＊Module ambient temperature	:	-5 to 60℃
＊Insulation method	:	Photocoupler insulation

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■Specifications

ITEM		SPECIFICATION
Output	Number of channels	16 (16ch common isolation)
	Contact	Dry / A contact(Normally Open)
	Contact method	Open collector sink output (minus common) *1
	Contact on voltage	Less than 3V
	Max rating contact voltage	DC250V
	Max contact current	Continuous 75mA
	Data refresh cycle	ON → OFF : Less than 1ms OFF → ON : Less than 1ms
Operation cycle usable in DPS		5 msec or more
Dielectric strength		AC1500 V between output terminal and PE
Communication with IOA	Communicaton method	LVDS
	Communication speed	100Mbps
Self-diagnostic functions		Power voltage check (24V, 3.3V, 1.2V) Clock check (FPGA-MCU for diagnosis, MCU for diagnosis -FPGA) Heartbeat check (FPGA-MCU for diagnosis, MCU for diagnosis -FPGA) CRC check (FPGA)
Protection	(Power supply Protection)	Overvoltage protection Overcurrent protection
Indicator	Display LED	4 : RUN(Run) / STS(Status) /NSA(Network status A) / NSB(Network status B)
	Channel State LED	16 : Ch1 to Ch16
Insulation method		Photocoupler insulation
Hot swap		Possible
Power supply		DC24V ±20% (The voltage supplied from the backplane)
Environmental conditions	Module ambient temperature	(Operating) -5 to 60°C (Storage) -40 to 85°C
	Module ambient humidity	10～95% RH or less (without condensation)
Vibration		3.5mm @5 to 8.4Hz 1G @8.4 to 150Hz
Shock		15G 11ms
Current consumption		Less than 51mA
Weight		0.10kg
Dimensions		62mmD x 94mmH x 46mmW (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) ".
For compliant modules of this product, please refer to " Compliant accessory connector list (CGS-S9902-E-XX) ".

*1 Be careful as it will always be "ON" if LSDOM02 and 03 are wired in reverse polarity.
Also, if overcurrent is applied in that state, the module will burn out.

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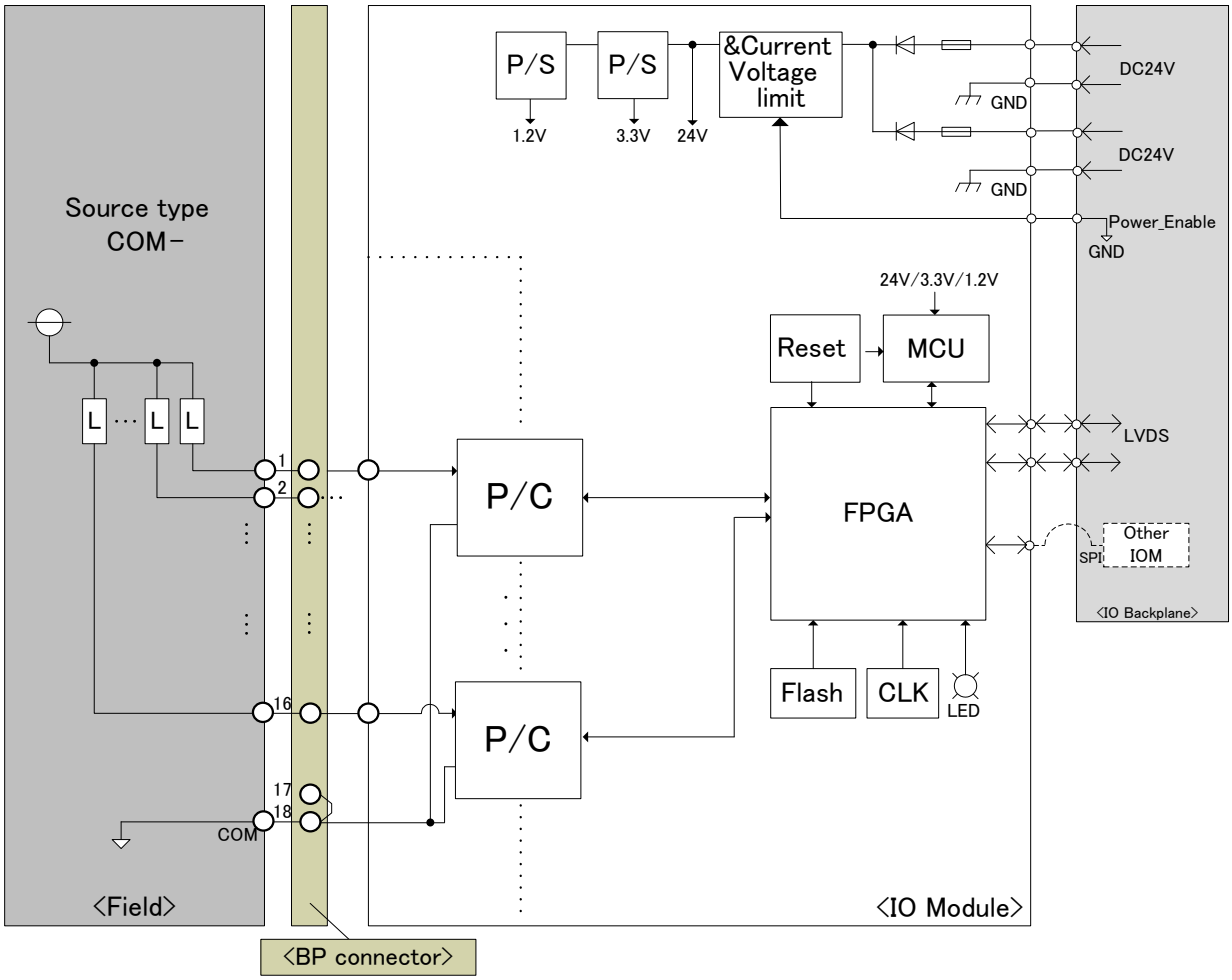
■Block diagram



P/S	:	Power supply
COM	:	Common
CLK	:	Clock
FPGA	:	Field programmable gate array
LED	:	Light emitting diode
MCU	:	Micro control unit
GND	:	Ground
IOM	:	I/O module
IOA	:	I/O adapter
LVDS	:	Low Voltage Differential Signaling
BP	:	Backplane
P/C	:	Photocoupler
	:	Fuse
	:	Diode
		Power supply
L		Load