MITSUBISHI POWER

LSGCM05 CAN Communication module

LS communication CAN 2 ch

■Summary

∗Communication port : 2 (Individual isolation)

∗Module ambient temperature : -5 to 60°C

MITSUBISHI POWER

LSGCM05 CAN Communication module

LS communication CAN 2 ch

■Specifications

ITEM		SPECIFICATION
Communication port	Number of channels	2 (Individual isolation)
	Communication speed	50 K, 125 K, 250 K, 500 K, 1 Mbps *Compliant with ISO 11898 standard
	Communication size	Maximum transmit / receive total 12 Kbytes
	Supported protocol	Standard CAN (Standard format only) CANopen (Standard format only) J1939 (Extended format only)
	Number of registered commands	Event transmission command: 100 pcs / channel *1 Periodic send command: 100 pcs / channel *1 Receive command: 100 pcs / channel *1
	Support command	CANopen Transmit / receive NMT master message Sending / receiving Guarding request message Send / receive Heartbeat message Send / receive Emergency message Send / receive Sync message Transmit / receive Process data message J1939 Address Claim function not supported (No dynamic network configuration change) Packet segmentation function not supported (Maximum data length of one message is 8 bytes) Supplement) Position the extended ID and specify it in the communication setting file
	Duplication correspondence	Possible (Two units installed, Select data in CPU Application Logic) *2
Terminating resistance		Required for external line connection terminal block side
Dielectric voltage		DC 500 V
Communication with IOA	Communicaton method	LVDS
	Communication speed	100 Mbps
Self-diagnostic functions		Power voltage check (24 V, 3.3 V, 1.2 V) Clock abnormal check (FPGA-MCU for diagnosis, MCU for diagnosis -FPGA) Heartbeat check (FPGA-MCU for diagnosis, MCU for diagnosis -FPGA) CRC check (FPGA) Check communication setting file Communication check WDT monitoring (communication MCU)
Protection	(Power supply protection)	Overvoltage protection Overcurrent protection
Indicator	Status indication LED	4: RUN(Run) / STS(Status) / NSA(Network status A) / NSB(Network status B)
	Communicaton LED	4: TXD (CH0-1 TXD Status) /RXD (CH0-1 RXD Status)
Insulation type		iCoupler (Analog devices)*3
Hot swap		possible
Power supply		DC 24 V ±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	(Operating / Storage) 10 to 95% RH (No condensation)
Vibration		3.5 mm @ 5 Hz to 8.4 Hz 1 G @ 8.4 Hz to 150 Hz
Shock		15 G 11 ms
Rated Current		150 mA
Weight		0.124 kg
Dimensions		97 mm (D) x 94 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) ".
For compliant modules of this product, please refer to " Compliant accessory connector list (CGS-S9902-E-XX) ".

*1 Depending on the system environment, adjustment such as slowing down the communication cycle is required.
*2 To make this module redundant, use a single-correspondence backplane (LSIOB01/LSIOB01-2/LSIOB01-4).
It can be used as a redundant by installing two of this module, establishing two independent communication lines, and then selecting the data in the upper application logic.

*3 iCoupler is an analog technology company's isolation technology.
By combining high-speed CMOS and monolithic air core transformer, it has excellent performance characteristics.

DIASYS Netmation®
DIASYS Netmation4S®

MOVE THE WORLD FORW>RD MITSUBISHI HEAVY INDUSTRIES GROUP

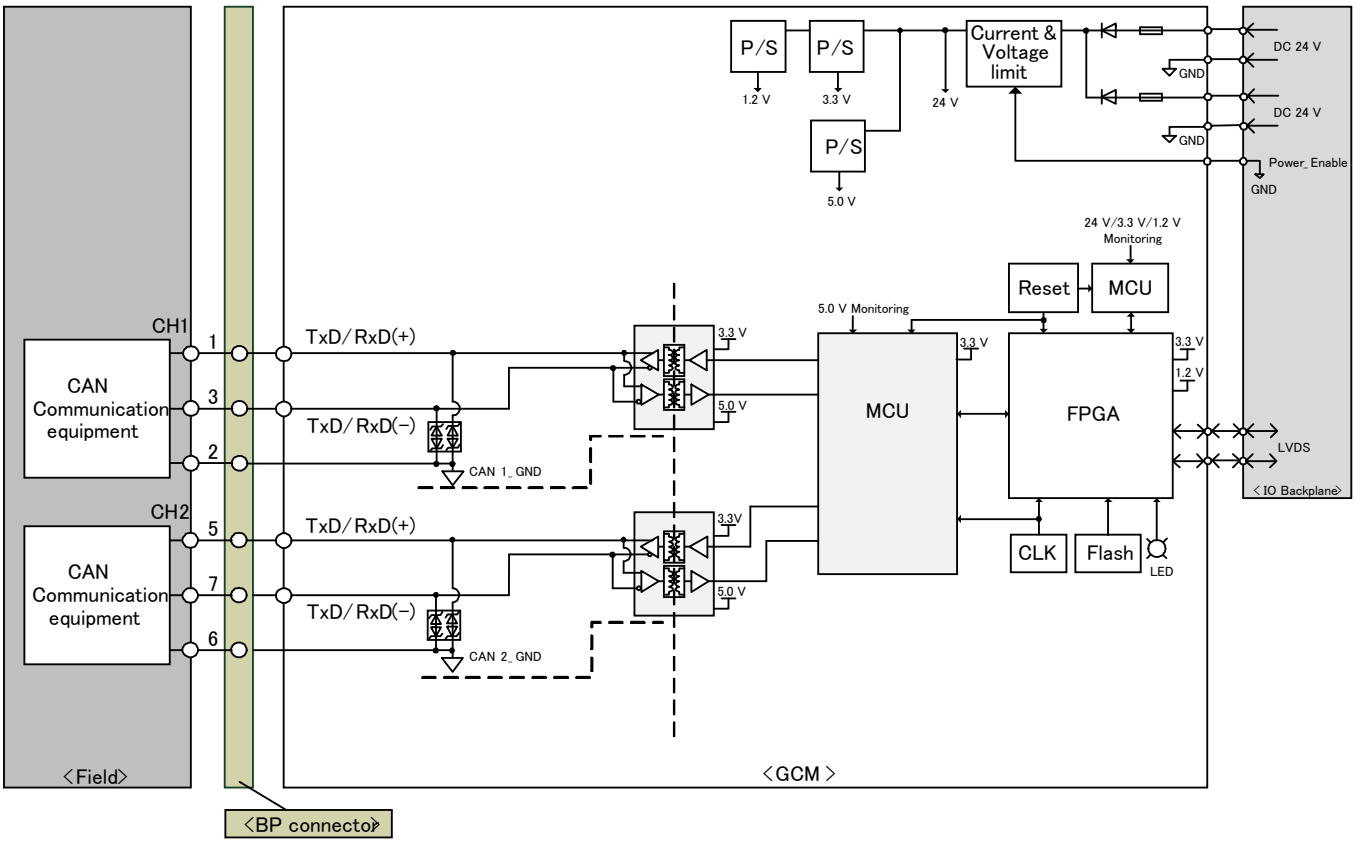
Mitsubishi Power is a power solutions brand of Mitsubishi Heavy Industries.

MITSUBISHI POWER

LSGCM05 CAN Communication module

LS communication CAN 2 ch

■Block diagram



P/S	:	Power supply
CLK	:	Clock
FPGA	:	Field programmable gate array
LED		Light emitting diode
MCU	:	Micro control unit
GND	:	Ground
CANx_GND	:	Isolation ground
LVDS	:	Low Voltage Differential Signaling
BP	:	BackPlane
	:	fuse
	:	diode
	:	ESD protection diode

DIASYS Netmation®
DIASYS Netmation4S®

MOVE THE WORLD FORWARD MITSUBISHI HEAVY INDUSTRIES GROUP

Mitsubishi Power is a power solutions brand of Mitsubishi Heavy Industries.

CGS-S7705-E-10 (2025.10.31)