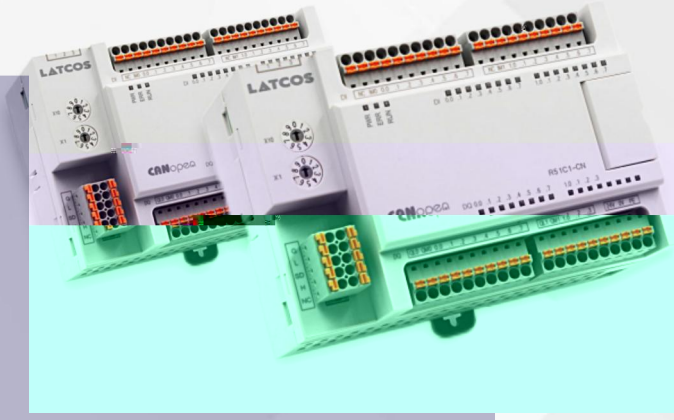
User Manual



RX ٧ ẇ ẩ LR ⁴ ɖ

CANOPEN

Remote IO Module

IO

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α 5 β ɯ

CANOPEN® CIA

α 6 β љ̧ ṉ Ώ̣

α 7 β ○ ΰ

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IP20

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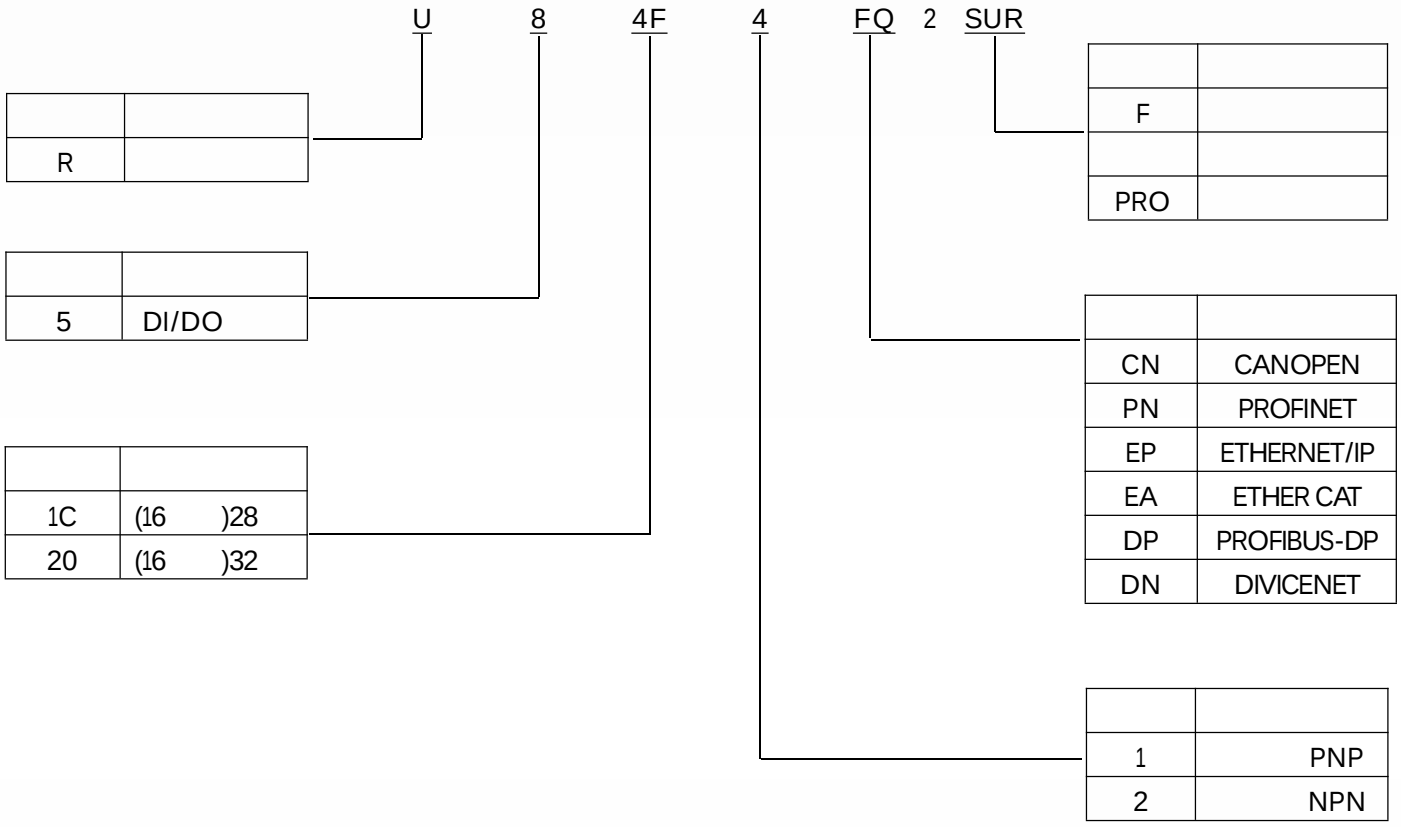
R51C1-CN I/O CANOPEN V0

I/O

CANOPEN IO



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1	R51C1-CN	16DI 12DQ IO CANOPEN V0 I/O

O 4 FDQRSHQ ⋆ L2R ⁴ ɖ

515 U84F40FQ L — Ǝ ̃Ą

R51C1-CN

51514 GL L— 6181; ü W ƒ

DI 2

Ẑ M	گ ﻩ	L —
1		16
2		2 bytes
3	Ton	Type. 18uS / Max. 35uS
4	Toff	Type. 135uS / Max. 250uS
5		
6		
7		24 V DC (-15 %/+20 %), (IEC 61131-2, type 1)
8	“0“	-3...+5 V (IEC 61131-2, type 1)
9	“1“	15...30 V (IEC 61131-2, type 1)
10		Typ. 10mA/Ch(IEC 61131-2, type 1)
11		/ 500V DC

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51515 GT L—

MOSFET DQ 3

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1		12
2		2 bytes
3	Ton	Type. 12uS / Max. 25uS
4	Toff	Type. 10mS / Max. 20mS ( )
5		
6		
7		
8		24 V DC (-15 %/+20 %), (IEC 61131-2, type 1)
9		Max. 0.5 A /Ch,
10		6A
11		2 2-Pin

O 6 PRVIHW ّ ˛ L—

51516 FDQRSHQ ڋ 3 L—

CANOPEN 4

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1		CiA 301 V4.02, CiA 401 V2.1, CiA 303-3 V1.0
2	PDO	TPDO1/RPDO1
3		/
4		20k, 50K, 125K, 250K, 500K,1000K kbps
5		01~99
6		5PIN
7		99
8		15kV 8kV IEC61000-4-2
9		2
10		IP20

O 7 FDQRSHQ ڋ 3 L—

51517 ≠ ╟ L—

3 MOSFET

3

24V DC (-15 %/+20 %) 0.5A

I/O 500V DC

. 24V DC (-15 %/+20 %) 16*10mA I/O

500V DC

.MOSFET 24V DC (-15 %/+20 %) 8*0.5A

I/O 500V DC

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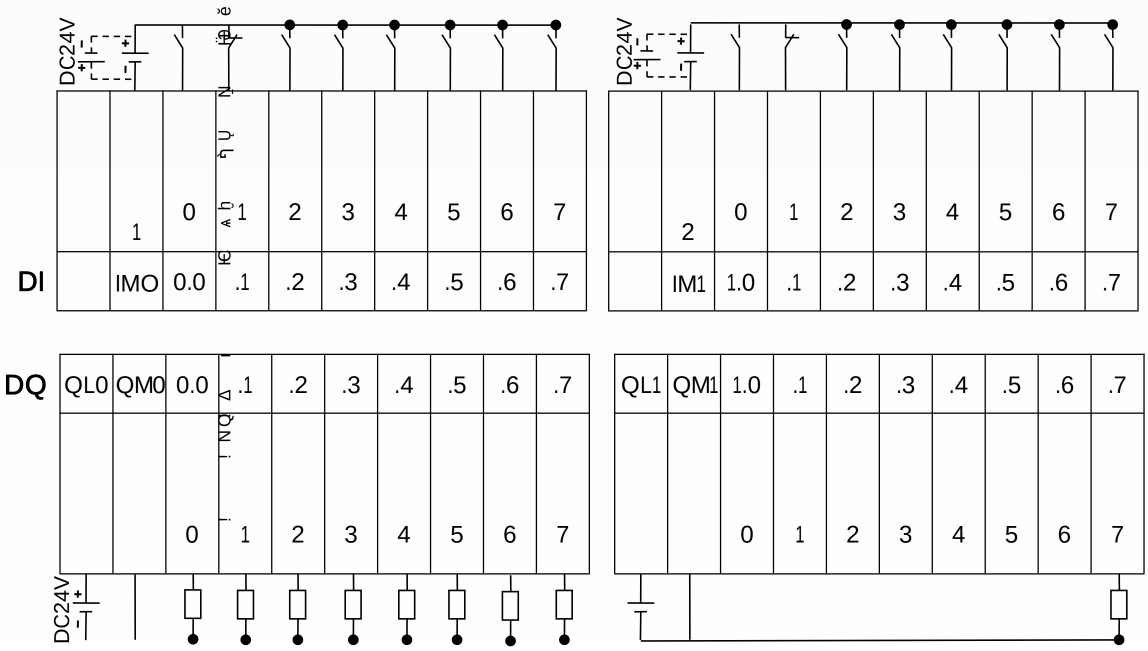

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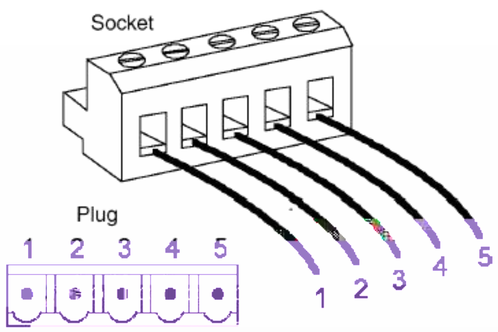
5PIN CANOPEN CiA 303_1

V1.8.0 CANopen recommendation - Part 1 Cabling and connector pin assignment



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1	G	CAN
2	L	CAN L
3	SD	
4	H	CAN H
5	NC	NC

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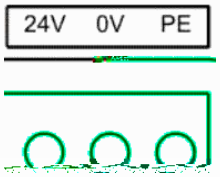

24V	24V
0V	0V
PE	

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717 ǐ LG ⊢ ∧

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ID ID

01~99 ID

718 ↓ ◕ Ψ

Edxgudwh	4	5	6
20K	0	1	0
50K	0	1	1
125K	1	0	0
250K	1	0	1
500K	1		

O : FDQRSHQ ↓ ◕ Ψ

719 0HG ĩ ˆ

LED 2 I/O

71914 ٩ ‹ ◦ ĩ ˆ

3 LED 8

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PWR		24V	
		ON	
		OFF	
ERR			
		ON	CAN
		OFF	CAN
RUN			
		ON	operate
			stop
			PRE -OPERATIONAL

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71915 L2R ◦ ĩ ˆ

/ LED /
“1” / “0”

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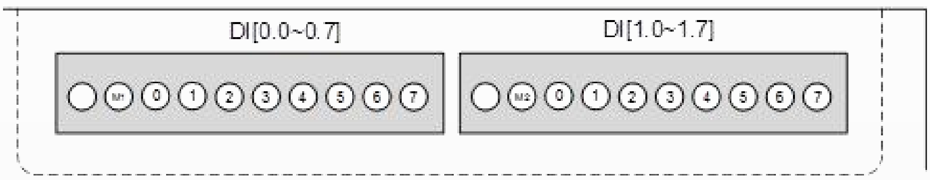
10P 16 DI-0 DI-1



GI j lwd0 Lq s xw03		GI j lwd0 Lq s xw04	
○		○	
M1(*)	DI 1	M2(*)	DI 2
0	DI-0.0	0	DI-1.0
1	DI-0.1	1	DI-1.1
2	DI-0.2	2	DI-1.2
3	DI-0.3	3	DI-1.3
4	DI-0.4	4	DI-1.4
5	DI-0.5	5	DI-1.5
6	DI-0.6	6	DI-1.6
7	DI-0.7	7	DI-1.7

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* M1 M2

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10P 12 16P

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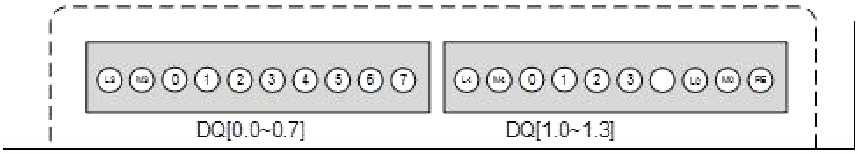

GI j lwd0 Rxws xw 03		GI j lwd0 Rxws xw 04	
L3(*)	DQ	L4(*)	DQ
M3(*)	DQ	M4(*)	DQ
0	DQ-0.0	0	DQ-0.0
1	DQ -0.1	1	DQ -0.1
2	DQ -0.2	2	DQ -0.2
3	DQ -0.3	3	DQ -0.3
4	DQ -0.4	○	
5	DQ -0.5	L0	4.3
6	DQ -0.6	M0	
7	DQ -0.7	PE	

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* L3/M3 L4/M4

DQ 24V

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R51C1-CN I/O CANOPEN CAN

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CANOPEN

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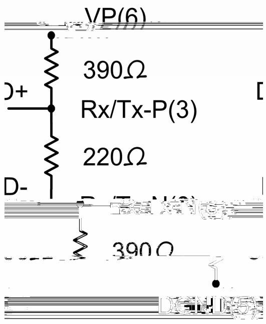

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1 M	25
800	50
500	100
250	250
125	500
50	1000
20	2500
10	5000

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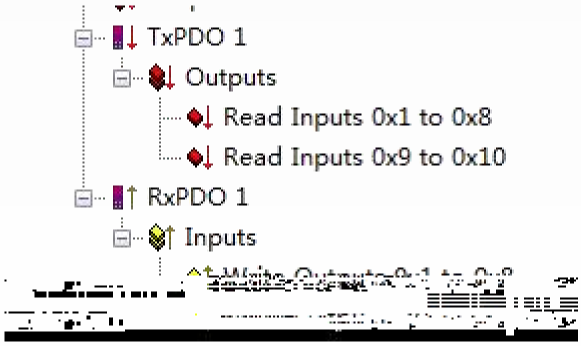
R51C1-CAN-F DI/DQ 7

- 16 TxPDO1
- 12 RxPDO1



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R51C1-CAN -F 6.1

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CiA301 5

- Reset Node
- Reset Communication
- Pre-operational
  RUN TPDO
- operate
  RUN
-

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81615 Ļ È ɓ Ơ

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1000	VAR	Device type	UNSIGNED32
1001	VAR	Error register	UNSIGNED8
1003	ARRAY	Pre-defined error field	UNSIGNED32
1005	VAR	COB-ID SYNC	UNSIGNED32
1006	VAR	Communication cycle period	UNSIGNED32
1007	VAR	Synchronous window length	UNSIGNED32
1008	VAR	Manufacturer device name	VIS-STRING
1009	VAR	Manufacturer hardware version	VIS-STRING
100A	VAR	Manufacturer software version	VIS-STRING
100C	VAR	Guard time	UNSIGNED16
100D	VAR	Life time factor	UNSIGNED8
1014	VAR	COB-ID EMCY	UNSIGNED32
1015	VAR	Inhibit time EMCY	UNSIGNED16
1016	ARRAY	Consumer heartbeat time	UNSIGNED32
1017	VAR	Produce heartbeat time	UNSIGNED16
1018	RECORD	Identity object	Identity
1029	ARRAY	Error behavior	UNSIGNED8
1200	RECORD	1st server SDO Parameter	SDO Parameter
1400	RECORD	1st receive PDO Parameter	PDO Parameter
1600	RECORD	1st receive PDO mapping	PDO Parameter
1800	RECORD	1st transmit PDO Parameter	PDO Parameter
1A00	RECORD	1st transmit PDO mapping	PDO Parameter
6000	ARRAY	Read input 8-bit	UNSIGNED8
6002	ARRAY	Polarity input 8-bit	UNSIGNED8
6003	ARRAY	Filter constant input 8-bit	UNSIGNED8
6005	VARIABLE	Global interrupt enable digital 8-bit	UNSIGNED8
6006	ARRAY	Interrupt mask any change 8-bit	UNSIGNED8
6007	ARRAY	Interrupt mask low–to-high 8-bit	UNSIGNED8
6008	ARRAY	Interrupt mask high-to-low 8-bit	UNSIGNED8
6200	ARRAY	Write output 8-bit	UNSIGNED8
6202	ARRAY	Change polarity output 8-bit	UNSIGNED8
6206	ARRAY	Error mode output 8-bit	UNSIGNED8
6207	ARRAY	Error value output 8-bit	UNSIGNED8
6208	ARRAY	Filter mask output 8-bit	UNSIGNED8

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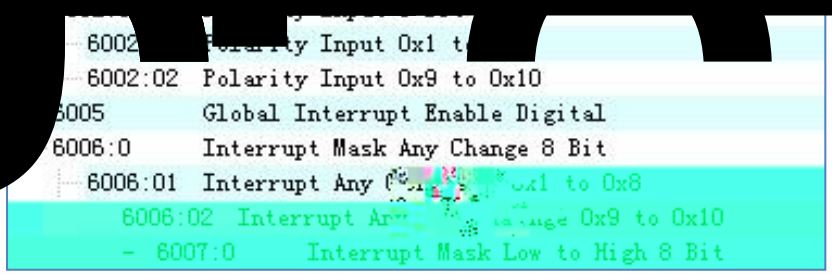
6002 Polarity Input 0x1 t
6002:02 Polarity Input 0x9 to 0x10
6005 Global Interrupt Enable Digital
6006:0 Interrupt Mask Any Change 8 Bit
6006:01 Interrupt Any
0x1 to 0x8
6006:02 Interrupt Ar
Change 0x9 to 0x10
6007:0 Interrupt Mask Low to High 8 Bit

[redacted]

[redacted]