

COIA-M0 Node 1 RA DefaultMix

Electronic Datasheet Information

Version 3, revision 1

Generic CiA 401 I/O Node

Created by CANopen Architect Professional version 10.50.6240

Created on 05-05-2003, 09:41PM by ESAcademy

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Electronic Datasheet for CANopenIA-M0 Module by Embedded Systems Academy

www.em-sa.com, www.canopenia.com

Order code: ESS-COIA-M0

Configuration:

Bitrate 125k

Node ID: 1

Port 0: Remote access, UART TTL

Port 1: Digital Input at 6000h,1- low nibble

Port 2: Digital Output at 6200h,1 - low nibble

Port 3: Digital Output at 6200h,1 - high nibble

Port 4: Internal Analog Input at 6401h,1-4

Port 5: External Analog Input at 6401h, 5-8

Port 6: External Analog Output at 6411h, 1-4

Product Information

Property	Value
Vendor Name	Embedded Systems Academy
Vendor ID	0x00455341
Product Name	CANopenIA-M0 Default Configuration
Product Code	0xC01A0101
Revision Number	0x00020002
Order Code	ESS-COIA-M0

Commissioning Information

Property	Value
Node ID	0x01
Name	COIA-M0 Default
Bitrate	125 kbps
Network Number	0
Network Name	
LSS Serial Number	0x00000000
CANopen Manager	No

PDO Configuration

Communication Parameters

PDO	COBID	Tx Type	Inhibit Time	Event Time	Sync Start
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RPDO1	\$NODEID+0x200	255		
RPDO2	\$NODEID+0x300	255		
RPDO3	\$NODEID+0x80000400	255		
RPDO4	\$NODEID+0x80000500	255		
TPDO1	\$NODEID+0x180	255	25.0 ms	0 ms
TPDO2	\$NODEID+0x280	255	25.0 ms	0 ms
TPDO3	\$NODEID+0x00000380	255	25.0 ms	0 ms
TPDO4	\$NODEID+0x80000480	255	25.0 ms	0 ms

Mappings

PDO	Mappings
RPDO1	[0x6200,0x01] Write Digital Output 8-bit - DigOutput8_1 (Unsigned8)
RPDO2	[0x6411,0x01] Write Analog Output 16-bit - AnalogOutput16_1 (Integer16)
	[0x6411,0x02] Write Analog Output 16-bit - AnalogOutput16_2 (Integer16)
	[0x6411,0x03] Write Analog Output 16-bit - AnalogOutput16_3 (Unsigned16)
	[0x6411,0x04] Write Analog Output 16-bit - AnalogOutput16_4 (Unsigned16)
RPDO3	[0x6411,0x05] Write Analog Output 16-bit - AnalogOutput16_5 (Integer16)
	[0x6411,0x06] Write Analog Output 16-bit - AnalogOutput16_6 (Integer16)
	[0x6411,0x07] Write Analog Output 16-bit - AnalogOutput16_7 (Integer16)
	[0x6411,0x08] Write Analog Output 16-bit - AnalogOutput16_8 (Integer16)
RPDO4	[0x6411,0x09] Write Analog Output 16-bit - AnalogOutput16_9 (Integer16)
	[0x6411,0x0A] Write Analog Output 16-bit - AnalogOutput16_A (Integer16)
	[0x6411,0x0B] Write Analog Output 16-bit - AnalogOutput16_B (Integer16)
	[0x6411,0x0C] Write Analog Output 16-bit - AnalogOutput16_C (Integer16)
TPDO1	[0x6000,0x01] Read Digital Input 8-bit - DigInput8_1 (Unsigned8)
TPDO2	[0x6401,0x01] Read Analog Input 16-bit - AnalogInput16_1 (Unsigned16)
	[0x6401,0x02] Read Analog Input 16-bit - AnalogInput16_2 (Unsigned16)
	[0x6401,0x03] Read Analog Input 16-bit - AnalogInput16_3 (Unsigned16)
	[0x6401,0x04] Read Analog Input 16-bit - AnalogInput16_4 (Unsigned16)
TPDO3	[0x6401,0x05] Read Analog Input 16-bit - AnalogInput16_5 (Unsigned16)
	[0x6401,0x06] Read Analog Input 16-bit - AnalogInput16_6 (Unsigned16)
	[0x6401,0x07] Read Analog Input 16-bit - AnalogInput16_7 (Unsigned16)
	[0x6401,0x08] Read Analog Input 16-bit - AnalogInput16_8 (Unsigned16)
TPDO4	[0x6401,0x09] Read Analog Input 16-bit - AnalogInput16_9 (Unsigned16)
	[0x6401,0x0A] Read Analog Input 16-bit - AnalogInput16_A (Unsigned16)
	[0x6401,0x0B] Read Analog Input 16-bit - AnalogInput16_B (Unsigned16)
	[0x6401,0x0C] Read Analog Input 16-bit - AnalogInput16_C (Unsigned16)

Object Dictionary

Overview

Index	Subindex	Name	Type	Access	Default Value
0x0002	0x00	INTEGER8	I8	CO	
0x0003	0x00	INTEGER16	I16	CO	
0x0004	0x00	INTEGER32	I32	CO	
0x0005	0x00	UNSIGNED8	U8	CO	
0x0006	0x00	UNSIGNED16	U16	CO	
0x0007	0x00	UNSIGNED32	U32	CO	
0x1000	0x00	Device Type	U32	RO	0x000F0191

0x1001	0x00	Error Register	U8	RO	0
0x1003	0x00	Pre-Defined Error Field	U8	RW	0x00
	0x01	Pre-Defined Error Field 1	U32	RO	
	0x02	Pre-Defined Error Field 2	U32	RO	
	0x03	Pre-Defined Error Field 3	U32	RO	
	0x04	Pre-Defined Error Field 4	U32	RO	
0x1005	0x00	COB-ID SYNC	U32	RW	0x00000080
0x1008	0x00	Manufacturer Device Name	VisStr	RO	See description
0x1009	0x00	Manufacturer Hardware Version	VisStr	RO	See description
0x100A	0x00	Manufacturer Software Version	VisStr	RO	See description
0x1014	0x00	COB-ID EMCY	U32	CO	\$NODEID+0x80
0x1015	0x00	Inhibit Time Emergency	U16	RW	0
0x1017	0x00	Producer Heartbeat Time	U16	RW	0
0x1018	0x00	Identity Object	U8	RO	4
	0x01	Vendor ID	U32	RO	0x00455341
	0x02	Product Code	U32	RO	0xC01A0101
	0x03	Revision number	U32	RO	0x00020002
	0x04	Serial number	U32	RO	0xFFFFFFFF
0x1400	0x00	Receive PDO Communication Parameter	U8	CO	0x02
	0x01	COB-ID	U32	RW	\$NODEID+0x200
	0x02	Transmission Type	U8	RW	255
0x1401	0x00	Receive PDO Communication Parameter	U8	CO	0x02
	0x01	COB-ID	U32	RW	\$NODEID+0x300
	0x02	Transmission Type	U8	RW	255
0x1402	0x00	Receive PDO Communication Parameter	U8	CO	0x02
	0x01	COB-ID	U32	RW	\$NODEID+0x80000400
	0x02	Transmission Type	U8	RW	255
0x1403	0x00	Receive PDO Communication Parameter	U8	CO	0x02
	0x01	COB-ID	U32	RW	\$NODEID+0x80000500
	0x02	Transmission Type	U8	RW	255
0x1600	0x00	Receive PDO Mapping Parameter	U8	CO	1
	0x01	PDO Mapping Entry	U32	CO	0x62000108
0x1601	0x00	Receive PDO Mapping Parameter	U8	CO	4
	0x01	PDO Mapping Entry	U32	CO	0x64110110
	0x02	PDO Mapping Entry	U32	CO	0x64110210
	0x03	PDO Mapping Entry	U32	CO	0x64110310

	0x04	PDO Mapping Entry	U32	CO	0x64110410
0x1602	0x00	Receive PDO Mapping Parameter	U8	CO	4
	0x01	PDO Mapping Entry	U32	CO	0x64110510
	0x02	PDO Mapping Entry	U32	CO	0x64110610
	0x03	PDO Mapping Entry	U32	CO	0x64110710
	0x04	PDO Mapping Entry	U32	CO	0x64110810
	0x04	PDO Mapping Entry	U32	CO	0x64110810
0x1603	0x00	Receive PDO Mapping Parameter	U8	CO	4
	0x01	PDO Mapping Entry	U32	CO	0x64110910
	0x02	PDO Mapping Entry	U32	CO	0x64110a10
	0x03	PDO Mapping Entry	U32	CO	0x64110b10
	0x04	PDO Mapping Entry	U32	CO	0x64110c10
	0x04	PDO Mapping Entry	U32	CO	0x64110c10
0x1800	0x00	Transmit PDO Communication Parameter	U8	CO	0x05
	0x01	COB-ID	U32	RW	\$NODEID+0x180
	0x02	Transmission Type	U8	RW	255
	0x03	Inhibit Time	U16	RW	250
	0x05	Event Timer	U16	RW	0
	0x05	Event Timer	U16	RW	0
0x1801	0x00	Transmit PDO Communication Parameter	U8	CO	0x05
	0x01	COB-ID	U32	RW	\$NODEID+0x280
	0x02	Transmission Type	U8	RW	255
	0x03	Inhibit Time	U16	RW	250
	0x05	Event Timer	U16	RW	0
	0x05	Event Timer	U16	RW	0
0x1802	0x00	Transmit PDO Communication Parameter	U8	CO	0x05
	0x01	COB-ID	U32	RW	\$NODEID+0x00000380
	0x02	Transmission Type	U8	RW	255
	0x03	Inhibit Time	U16	RW	250
	0x05	Event Timer	U16	RW	0
	0x05	Event Timer	U16	RW	0
0x1803	0x00	Transmit PDO Communication Parameter	U8	CO	0x05
	0x01	COB-ID	U32	RW	\$NODEID+0x80000480
	0x02	Transmission Type	U8	RW	255
	0x03	Inhibit Time	U16	RW	250
	0x05	Event Timer	U16	RW	0
	0x05	Event Timer	U16	RW	0
0x1A00	0x00	Transmit PDO Mapping Parameter	U8	CO	1
	0x01	PDO Mapping Entry	U32	CO	0x60000108
0x1A01	0x00	Transmit PDO Mapping Parameter	U8	CO	4
	0x01	PDO Mapping Entry	U32	CO	0x64010110
	0x02	PDO Mapping Entry	U32	CO	0x64010210
	0x03	PDO Mapping Entry	U32	CO	0x64010310

	0x04	PDO Mapping Entry	U32	CO	0x64010410
0x1A02	0x00	Transmit PDO Mapping Parameter	U8	CO	4
	0x01	PDO Mapping Entry	U32	CO	0x64010510
	0x02	PDO Mapping Entry	U32	CO	0x64010610
	0x03	PDO Mapping Entry	U32	CO	0x64010710
	0x04	PDO Mapping Entry	U32	CO	0x64010810
0x1A03	0x00	Transmit PDO Mapping Parameter	U8	CO	4
	0x01	PDO Mapping Entry	U32	CO	0x64010910
	0x02	PDO Mapping Entry	U32	CO	0x64010a10
	0x03	PDO Mapping Entry	U32	CO	0x64010b10
	0x04	PDO Mapping Entry	U32	CO	0x64010c10
0x1F50	0x00	Program Data	U8	CO	0x02
	0x01	Program Data 1	Dom	WO	See description
	0x02	Program Data 2	Dom	WO	See description
0x1F51	0x00	Program Control	U8	CO	0x01
	0x01	Control Program 1	U8	WO	1
0x1F80	0x00	NMT Startup	U32	RW	0x00000000
0x5F00	0x00	COIA RA Status	U8	CO	0x06
	0x01	Node ID	U8	RO	
	0x02	NMT State	U8	RO	
	0x03	CAN HW Status	U8	RO	
	0x04	Info and Version	U32	RO	
	0x05	Chip Serial Number	Dom	RO	See description
	0x06	Chip ID	U8	RO	
0x5F01	0x00	COIA Port Configuration	U8	CO	0x07
	0x01	Port 0 Configuration	U8	CO	0x06
	0x02	Port 1 Configuration	U8	CO	0x01
	0x03	Port 2 Configuration	U8	CO	0x02
	0x04	Port 3 Configuration	U8	CO	0x82
	0x05	Port 4 Configuration	U8	CO	3
	0x06	Port 5 Configuration	U8	CO	4
	0x07	Port 6 Configuration	U8	CO	5
0x5F02	0x00	COIA HW Selection	U8	CO	0x08
	0x01	ADC Selection	U8	CO	0
	0x02	DAC Selection	U8	CO	0
	0x03	Error Behavior	U8	CO	0
	0x04	Reset Delay	U16	CO	0
	0x05	Analog Shift	U8	CO	0
	0x06	Analog Transmit Delta	U16	CO	0
	0x07	SDO Response Time	U16	CO	0
	0x08	Compatibility Settings	U16	CO	0
0x5F03	0x00	COIA RA Config	U8	CO	0x02
	0x01	Bit rate selection	U8	RO	1
	0x02	Generic CAN messages	U8	RW	0
0x5FFF	0x00	COIA Config Loader	U8	CO	0x02
	0x01	COIA Config Control	U32	RW	

	0x02	COIA Config Data	Dom	RW	See description
0x6000	0x00	Read Digital Input 8-bit	U8	CO	0x08
	0x01	DigInput8_1	U8	RO	
	0x02	DigInput8_2	U8	RO	
	0x03	DigInput8_3	U8	RO	
	0x04	DigInput8_4	U8	RO	
	0x05	DigInput8_5	U8	RO	
	0x06	DigInput8_6	U8	RO	
	0x07	DigInput8_7	U8	RO	
	0x08	DigInput8_8	U8	RO	
0x6002	0x00	Polarity Digital Input	U8	CO	0x07
	0x01	Polarity Digital Input 1	U8	RW	0
	0x02	Polarity Digital Input 2	U8	RW	0
	0x03	Polarity Digital Input 3	U8	RW	0
	0x04	Polarity Digital Input 4	U8	RW	0
	0x05	Polarity Digital Input 5	U8	RW	0
	0x06	Polarity Digital Input 6	U8	RW	0
	0x07	Polarity Digital Input 7	U8	RW	0
0x6200	0x00	Write Digital Output 8-bit	U8	CO	0x08
	0x01	DigOutput8_1	U8	RWW	
	0x02	DigOutput8_2	U8	RWW	
	0x03	DigOutput8_3	U8	RWW	
	0x04	DigOutput8_4	U8	RWW	
	0x05	DigOutput8_5	U8	RWW	
	0x06	DigOutput8_6	U8	RWW	
	0x07	DigOutput8_7	U8	RWW	
	0x08	DigOutput8_8	U8	RWW	
0x6202	0x00	Polarity Digital Output	U8	CO	0x08
	0x01	Polarity Digital Output 1	U8	RW	0
	0x02	Polarity Digital Output 2	U8	RW	0
	0x03	Polarity Digital Output 3	U8	RW	0
	0x04	Polarity Digital Output 4	U8	RW	0
	0x05	Polarity Digital Output 5	U8	RW	0
	0x06	Polarity Digital Output 6	U8	RW	0
	0x07	Polarity Digital Output 7	U8	RW	0
	0x08	Polarity Digital Output 8	U8	RW	0
0x6206	0x00	Error Mode Output	U8	CO	0x08
	0x01	Error Mode Output 1	U8	RW	0xFF
	0x02	Error Mode Output 2	U8	RW	0xFF
	0x03	Error Mode Output 3	U8	RW	0xFF
	0x04	Error Mode Output 4	U8	RW	0xFF
	0x05	Error Mode Output 5	U8	RW	0xFF
	0x06	Error Mode Output 6	U8	RW	0xFF
	0x07	Error Mode Output 7	U8	RW	0xFF
	0x08	Error Mode Output 8	U8	RW	0xFF
0x6207	0x00	Error Value Output	U8	CO	0x08
	0x01	Error Value Output 1	U8	RW	0
	0x02	Error Value Output 2	U8	RW	0

	0x03	Error Value Output 3	U8	RW	0
	0x04	Error Value Output 4	U8	RW	0
	0x05	Error Value Output 5	U8	RW	0
	0x06	Error Value Output 6	U8	RW	0
	0x07	Error Value Output 7	U8	RW	0
	0x08	Error Value Output 8	U8	RW	0
0x6401	0x00	Read Analog Input 16-bit	U8	CO	0x0C
	0x01	AnalogInput16_1	U16	RO	
	0x02	AnalogInput16_2	U16	RO	
	0x03	AnalogInput16_3	U16	RO	
	0x04	AnalogInput16_4	U16	RO	
	0x05	AnalogInput16_5	U16	RO	
	0x06	AnalogInput16_6	U16	RO	
	0x07	AnalogInput16_7	U16	RO	
	0x08	AnalogInput16_8	U16	RO	
	0x09	AnalogInput16_9	U16	RO	
	0x0A	AnalogInput16_A	U16	RO	
	0x0B	AnalogInput16_B	U16	RO	
	0x0C	AnalogInput16_C	U16	RO	
0x6411	0x00	Write Analog Output 16-bit	U8	CO	0x0C
	0x01	AnalogOutput16_1	I16	RWW	
	0x02	AnalogOutput16_2	I16	RWW	
	0x03	AnalogOutput16_3	U16	RWW	
	0x04	AnalogOutput16_4	U16	RWW	
	0x05	AnalogOutput16_5	I16	RWW	
	0x06	AnalogOutput16_6	I16	RWW	
	0x07	AnalogOutput16_7	I16	RWW	
	0x08	AnalogOutput16_8	I16	RWW	
	0x09	AnalogOutput16_9	I16	RWW	
	0x0A	AnalogOutput16_A	I16	RWW	
	0x0B	AnalogOutput16_B	I16	RWW	
	0x0C	AnalogOutput16_C	I16	RWW	
0x6443	0x00	Analog Output Error Mode	U8	CO	0x04
	0x01	Analog Output Error Mode 1	U8	RW	
	0x02	Analog Output Error Mode 2	U8	RW	
	0x03	Analog Output Error Mode 3	U8	RW	
	0x04	Analog Output Error Mode 4	U8	RW	
0x6444	0x00	Analog Output Error Value	U8	CO	0x04
	0x01	Analog Output Error Value 1	U16	RW	
	0x02	Analog Output Error Value 2	U16	RW	

	0x03	Analog Output Error Value 3	U16	RW
	0x04	Analog Output Error Value 4	U16	RW

Device Type (0x1000)

Subindex	0x00
Data Type	Unsigned32
Access	ReadOnly
Can be mapped	No
Default Value	0x000F0191

Error Register (0x1001)

Subindex	0x00
Data Type	Unsigned8
Access	ReadOnly
Can be mapped	No
Default Value	0

Pre-Defined Error Field (0x1003)

Subindex	0x00
Name	Number of Errors
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0x00

Subindex	0x01
Name	Pre-Defined Error Field 1
Data Type	Unsigned32
Access	ReadOnly
Can be mapped	No

Subindex	0x02
Name	Pre-Defined Error Field 2
Data Type	Unsigned32
Access	ReadOnly
Can be mapped	No

Subindex	0x03
Name	Pre-Defined Error Field 3
Data Type	Unsigned32
Access	ReadOnly
Can be mapped	No

Subindex	0x04
Name	Pre-Defined Error Field 4
Data Type	Unsigned32
Access	ReadOnly

Can be mapped	No
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COB-ID SYNC (0x1005)

Subindex	0x00
Data Type	Unsigned32
Access	ReadWrite
Can be mapped	No
Default Value	0x00000080
Low Limit	0x00000001

Manufacturer Device Name (0x1008)

Subindex	0x00
Data Type	Visible String
Access	ReadOnly
Can be mapped	No
Default Value	CANopenIA-M0

Manufacturer Hardware Version (0x1009)

Subindex	0x00
Data Type	Visible String
Access	ReadOnly
Can be mapped	No
Default Value	Version 1.02

Manufacturer Software Version (0x100A)

Subindex	0x00
Data Type	Visible String
Access	ReadOnly
Can be mapped	No
Default Value	Default Mix V2.2

COB-ID EMCY (0x1014)

Subindex	0x00
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	\$NODEID+0x80

Inhibit Time Emergency (0x1015)

Subindex	0x00
Data Type	Unsigned16
Access	ReadWrite
Can be mapped	No
Default Value	0

Producer Heartbeat Time (0x1017)

Subindex	0x00
Data Type	Unsigned16
Access	ReadWrite
Can be mapped	No

Default Value	0
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Identity Object (0x1018)

Subindex	0x00
Name	number of entries
Data Type	Unsigned8
Access	ReadOnly
Can be mapped	No
Default Value	4

Subindex	0x01
Name	Vendor ID
Data Type	Unsigned32
Access	ReadOnly
Can be mapped	No
Default Value	0x00455341

Subindex	0x02
Name	Product Code
Data Type	Unsigned32
Access	ReadOnly
Can be mapped	No
Default Value	0xC01A0101

Subindex	0x03
Name	Revision number
Data Type	Unsigned32
Access	ReadOnly
Can be mapped	No
Default Value	0x00020002

Subindex	0x04
Name	Serial number
Data Type	Unsigned32
Access	ReadOnly
Can be mapped	No
Default Value	0xFFFFFFFF

Receive PDO Communication Parameter (0x1400)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x02

Subindex	0x01
Name	COB-ID

Data Type	Unsigned32
Access	ReadWrite
Can be mapped	No
Default Value	\$NODEID+0x200
Low Limit	0x00000181
High Limit	0xFFFFFFFF

Subindex	0x02
Name	Transmission Type
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	255

Receive PDO Communication Parameter (0x1401)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x02

Subindex	0x01
Name	COB-ID
Data Type	Unsigned32
Access	ReadWrite
Can be mapped	No
Default Value	\$NODEID+0x300
Low Limit	0x00000181
High Limit	0xFFFFFFFF

Subindex	0x02
Name	Transmission Type
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	255

Receive PDO Communication Parameter (0x1402)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x02
Low Limit	0x02
High Limit	0x05

Subindex	0x01
Name	COB-ID
Data Type	Unsigned32
Access	ReadWrite
Can be mapped	No
Default Value	\$NODEID+0x80000400
Low Limit	0x00000181
High Limit	0xFFFFFFFF

Subindex	0x02
Name	Transmission Type
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	255

Receive PDO Communication Parameter (0x1403)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x02
Low Limit	0x02
High Limit	0x05

Subindex	0x01
Name	COB-ID
Data Type	Unsigned32
Access	ReadWrite
Can be mapped	No
Default Value	\$NODEID+0x80000500
Low Limit	0x00000181
High Limit	0xFFFFFFFF

Subindex	0x02
Name	Transmission Type
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	255

Receive PDO Mapping Parameter (0x1600)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No

Default Value	1
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Subindex	0x01
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x62000108 [0x6200,0x01] Write Digital Output 8-bit - DigOutput8_1 (Unsigned8)

Receive PDO Mapping Parameter (0x1601)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	4

Subindex	0x01
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64110110 [0x6411,0x01] Write Analog Output 16-bit - AnalogOutput16_1 (Integer16)

Subindex	0x02
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64110210 [0x6411,0x02] Write Analog Output 16-bit - AnalogOutput16_2 (Integer16)

Subindex	0x03
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64110310 [0x6411,0x03] Write Analog Output 16-bit - AnalogOutput16_3 (Unsigned16)

Subindex	0x04
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const

Can be mapped	No
Default Value	0x64110410 [0x6411,0x04] Write Analog Output 16-bit - AnalogOutput16_4 (Unsigned16)

Receive PDO Mapping Parameter (0x1602)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	4
Low Limit	0
High Limit	8

Subindex	0x01
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64110510 [0x6411,0x05] Write Analog Output 16-bit - AnalogOutput16_5 (Integer16)

Subindex	0x02
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64110610 [0x6411,0x06] Write Analog Output 16-bit - AnalogOutput16_6 (Integer16)

Subindex	0x03
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64110710 [0x6411,0x07] Write Analog Output 16-bit - AnalogOutput16_7 (Integer16)

Subindex	0x04
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64110810 [0x6411,0x08] Write Analog Output 16-bit - AnalogOutput16_8

(Integer16)

Receive PDO Mapping Parameter (0x1603)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	4
Low Limit	0
High Limit	8

Subindex	0x01
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64110910 [0x6411,0x09] Write Analog Output 16-bit - AnalogOutput16_9 (Integer16)

Subindex	0x02
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64110a10 [0x6411,0x0A] Write Analog Output 16-bit - AnalogOutput16_A (Integer16)

Subindex	0x03
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64110b10 [0x6411,0x0B] Write Analog Output 16-bit - AnalogOutput16_B (Integer16)

Subindex	0x04
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64110c10 [0x6411,0x0C] Write Analog Output 16-bit - AnalogOutput16_C (Integer16)

Transmit PDO Communication Parameter (0x1800)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x05
Low Limit	0x02
High Limit	0x06

Subindex	0x01
Name	COB-ID
Data Type	Unsigned32
Access	ReadWrite
Can be mapped	No
Default Value	\$NODEID+0x180
Low Limit	0x00000181
High Limit	0xFFFFFFFF

Subindex	0x02
Name	Transmission Type
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	255

Subindex	0x03
Name	Inhibit Time
Data Type	Unsigned16
Access	ReadWrite
Can be mapped	No
Default Value	250

Subindex	0x05
Name	Event Timer
Data Type	Unsigned16
Access	ReadWrite
Can be mapped	No
Default Value	0

Transmit PDO Communication Parameter (0x1801)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x05
Low Limit	0x02

High Limit	0x06
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Subindex	0x01
Name	COB-ID
Data Type	Unsigned32
Access	ReadWrite
Can be mapped	No
Default Value	\$NODEID+0x280
Low Limit	0x00000181
High Limit	0xFFFFFFFF

Subindex	0x02
Name	Transmission Type
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	255

Subindex	0x03
Name	Inhibit Time
Data Type	Unsigned16
Access	ReadWrite
Can be mapped	No
Default Value	250

Subindex	0x05
Name	Event Timer
Data Type	Unsigned16
Access	ReadWrite
Can be mapped	No
Default Value	0

Transmit PDO Communication Parameter (0x1802)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x05
Low Limit	0x02
High Limit	0x06

Subindex	0x01
Name	COB-ID
Data Type	Unsigned32
Access	ReadWrite
Can be mapped	No
Default Value	\$NODEID+0x00000380

Low Limit	0x00000181
High Limit	0xFFFFFFFF

Subindex	0x02
Name	Transmission Type
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	255

Subindex	0x03
Name	Inhibit Time
Data Type	Unsigned16
Access	ReadWrite
Can be mapped	No
Default Value	250

Subindex	0x05
Name	Event Timer
Data Type	Unsigned16
Access	ReadWrite
Can be mapped	No
Default Value	0

Transmit PDO Communication Parameter (0x1803)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x05
Low Limit	0x02
High Limit	0x06

Subindex	0x01
Name	COB-ID
Data Type	Unsigned32
Access	ReadWrite
Can be mapped	No
Default Value	\$NODEID+0x80000480
Low Limit	0x00000181
High Limit	0xFFFFFFFF

Subindex	0x02
Name	Transmission Type
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No

Default Value	255
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Subindex	0x03
Name	Inhibit Time
Data Type	Unsigned16
Access	ReadWrite
Can be mapped	No
Default Value	250

Subindex	0x05
Name	Event Timer
Data Type	Unsigned16
Access	ReadWrite
Can be mapped	No
Default Value	0

Transmit PDO Mapping Parameter (0x1A00)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	1

Subindex	0x01
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x60000108 [0x6000,0x01] Read Digital Input 8-bit - DigInput8_1 (Unsigned8)

Transmit PDO Mapping Parameter (0x1A01)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	4

Subindex	0x01
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64010110 [0x6401,0x01] Read Analog Input 16-bit - AnalogInput16_1 (Unsigned16)

Subindex	0x02
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Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64010210 [0x6401,0x02] Read Analog Input 16-bit - AnalogInput16_2 (Unsigned16)

Subindex	0x03
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64010310 [0x6401,0x03] Read Analog Input 16-bit - AnalogInput16_3 (Unsigned16)

Subindex	0x04
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64010410 [0x6401,0x04] Read Analog Input 16-bit - AnalogInput16_4 (Unsigned16)

Transmit PDO Mapping Parameter (0x1A02)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	4
Low Limit	0
High Limit	8

Subindex	0x01
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64010510 [0x6401,0x05] Read Analog Input 16-bit - AnalogInput16_5 (Unsigned16)

Subindex	0x02
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64010610 [0x6401,0x06] Read Analog Input 16-bit - AnalogInput16_6 (Unsigned16)

Subindex	0x03
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64010710 [0x6401,0x07] Read Analog Input 16-bit - AnalogInput16_7 (Unsigned16)

Subindex	0x04
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64010810 [0x6401,0x08] Read Analog Input 16-bit - AnalogInput16_8 (Unsigned16)

Transmit PDO Mapping Parameter (0x1A03)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	4
Low Limit	0
High Limit	8

Subindex	0x01
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64010910 [0x6401,0x09] Read Analog Input 16-bit - AnalogInput16_9 (Unsigned16)

Subindex	0x02
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64010a10 [0x6401,0x0A] Read Analog Input 16-bit - AnalogInput16_A (Unsigned16)

Subindex	0x03
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64010b10

	[0x6401,0x0B] Read Analog Input 16-bit - AnalogInput16_B (Unsigned16)
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Subindex	0x04
Name	PDO Mapping Entry
Data Type	Unsigned32
Access	Const
Can be mapped	No
Default Value	0x64010c10 [0x6401,0x0C] Read Analog Input 16-bit - AnalogInput16_C (Unsigned16)

Program Data (0x1F50)

Subindex	0x00
Name	Highest Subindex
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x02

Subindex	0x01
Name	Program Data 1
Data Type	Domain
Access	WriteOnly
Can be mapped	No

Subindex	0x02
Name	Program Data 2
Data Type	Domain
Access	WriteOnly
Can be mapped	No

Program Control (0x1F51)

Subindex	0x00
Name	Number of Entries
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x01

Subindex	0x01
Name	Control Program 1
Data Type	Unsigned8
Access	WriteOnly
Can be mapped	No
Default Value	1

NMT Startup (0x1F80)

Subindex	0x00
Data Type	Unsigned32
Access	ReadWrite

Can be mapped	No
Default Value	0x00000000

COIA RA Status (0x5F00)

Subindex	0x00
Name	Highest Subindex
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x06

CANopenIA Remote Access Status Information.

All Information is read-only and intended to be accessed by the host through the remote access channel.

Subindex	0x01
Name	Node ID
Data Type	Unsigned8
Access	ReadOnly
Can be mapped	No

Node ID currently used by the node. A value outside the range 1 to 127 indicates, that a node ID was not yet assigned.

Subindex	0x02
Name	NMT State
Data Type	Unsigned8
Access	ReadOnly
Can be mapped	No

The current NMT state of the node. Same value as used by the CANopen heartbeat message to indicate the NMT state.

Subindex	0x03
Name	CAN HW Status
Data Type	Unsigned8
Access	ReadOnly
Can be mapped	No

CAN HW Error bits:

- 0: INIT – set after a completed initialization
- 1: CERR – set, if a CAN bit or frame error occurred
- 2: ERPA – set, if a CAN "error passive" occurred
- 3: RXOR – set, if a receive queue overrun occurred
- 4: TXOR – set, if a transmit queue overrun occurred
- 5: CANFD – set, if CAN hardware supports CAN FD
- 6: TXBSY – set, if Transmit queue is not empty
- 7: BOFF – set, if a CAN "bus off" error occurred

Subindex	0x04
Name	Info and Version
Data Type	Unsigned32
Access	ReadOnly
Can be mapped	No

Device information:

Bit: 0..7: 00h: Custom hardware
01h: CANgineBerry
02h: CANgineLight
03h: CANgineBT
04h: PCAN-RS232
05h: PCAN-xxx with PCAN-Basic API
06h: CANopenIA-M0
Bit: 8..15: 00h: Custom firmware
01h: CANopenIA Device
02h: CANopenIA Manager
03h: CANopenIA 447izer
Bit: 16..23: Firmware major version
Bit: 24..31: Firmware minor version

Subindex	0x05
Name	Chip Serial Number
Data Type	Domain
Access	ReadOnly
Can be mapped	No

Internal 128bit chip serial number.

Subindex	0x06
Name	Chip ID
Data Type	Unsigned8
Access	ReadOnly
Can be mapped	No

MCU hosting the firmware
1 for LPC11C24

COIA Port Configuration (0x5F01)

Subindex	0x00
Name	Highest Subindex
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x07

Port configuration options for each port 0 to 6.

Bit 0-3: Port type of the 4-bit port

- 1: Digital input
- 2: Digital output
- 3: Analog input (internal ADC, only on port 4)
- 4: Analog output (external DAC, only on port 5)
- 5: Analog input (external ADC, only on port 6)
- 6: TTL Uart activated (only on port 0)

Bit 4-6: Digital port Subindex

For digital ports (Index 6000h or 6200h) this specifies the Subindex value. A value from 0 to 7 is used to indicate Subindex 1 to 8.

Bit 7: Digital port nibble info

For digital ports this bit specifies if the 4 bits of the port are located in the lower (0) or the upper (4) nibble of the UNSIGNED8 object dictionary entry.

Subindex	0x01
Name	Port 0 Configuration
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x06

Subindex	0x02
Name	Port 1 Configuration
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x01

Subindex	0x03
Name	Port 2 Configuration
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x02

Subindex	0x04
Name	Port 3 Configuration
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x82

Subindex	0x05
Name	Port 4 Configuration
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	3

Subindex	0x06
Name	Port 5 Configuration
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	4

Subindex	0x07
Name	Port 6 Configuration
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	5

COIA HW Selection (0x5F02)

Subindex	0x00
Name	Highest Subindex
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x08

Subindex	0x01
Name	ADC Selection
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0

The following values are supported:

- 0: Analog devices AD7923
- 1: Texas instruments ADS7841
- 2: Microchip MCP3204

Subindex	0x02
Name	DAC Selection
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0

The following values are supported:

- 0: Analog devices AD5624B
- 1: Texas instruments DAC124S085
- 2: Maxim MAX5500

Subindex	0x03
Name	Error Behavior

Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0

Reserved, leave at zero

Subindex	0x04
Name	Reset Delay
Data Type	Unsigned16
Access	Const
Can be mapped	No
Default Value	0

Upon detection of a fatal failure the CANopenIA-M0 resets itself. The default delay for the reset is 100ms. Using this entry the error reset delay can be configured in the range from 100ms to 30000ms.

Subindex	0x05
Name	Analog Shift
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0

On the CANopen side the data representation for all analog data is UNSIGNED16 (0 to FFFFh) and the entire data range may be used. This configuration option allows the selection of various shifting methods:

- 0: (default) full 16bit range usable, data is shifted such, that the least significant bits are ignored
- 1: raw mode, data is passed on 1:1, the most significant bits are ignored
- 2: backward compatible CANopenIA-XA mode

Subindex	0x06
Name	Analog Transmit Delta
Data Type	Unsigned16
Access	Const
Can be mapped	No
Default Value	0

Setting this to a non-zero value modifies the change-of-state transmission behavior for analog input TPDOs. A raw analog input value must change by at least the delta value to trigger transmission of a TPDO. If multiple analog channels are mapped to a TPDO only a single channel needs to be at least the delta to trigger transmission of the TPDO.

Subindex	0x07
Name	SDO Response Time
Data Type	Unsigned16
Access	Const
Can be mapped	No

Default Value	0
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Setting this to a non-zero values causes SDO responses to be delayed by the specified number of milliseconds. Set to 17 for compatibility with the previous, slower generation CANopenIA-XA device.

Subindex	0x08
Name	Compatibility Settings
Data Type	Unsigned16
Access	Const
Can be mapped	No
Default Value	0

Each bit controls an aspect of behavior in order to improve compatibility with the previous generation CANopenIA-XA device.

Bit 0: When set an extra heartbeat is transmitted 50ms after bootup.

Bits 1-15: Reserved. Set to zero

COIA RA Config (0x5F03)

Subindex	0x00
Name	Highest Subindex
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x02

Subindex	0x01
Name	Bit rate selection
Data Type	Unsigned8
Access	ReadOnly
Can be mapped	No
Default Value	1

Serial bit rate used on UART side

- 1: 115200 (uses 115090)
- 2: 230400 (not supported)
- 3: 460800 (uses 468750)
- 4: 614400 (uses 600000)
- 5: 921600 (uses 947500)

Subindex	0x02
Name	Generic CAN messages
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

COIA Config Loader (0x5FFF)

Subindex	0x00
Name	Highest Subindex

Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x02

This index allows managing the configuration of the CANopenIA-M0 using a binary EDS setup file as supported by the EDS Editor CANopen Architect Standard or the CANopenIA-M0 setup utility. The device MUST be placed into the NMT state pre-operational before accessing these entries.

Subindex	0x01
Name	COIA Config Control
Data Type	Unsigned32
Access	ReadWrite
Can be mapped	No

This entry must be written with “INIT” to activate access to the binary EDS download. If the next write to this entry is “BACK”, then the EEPROM containing the binary EDS file is erased. On the next power or reset cycle the CANopenIA-M0 will start with its on chip default configuration.

Subindex	0x02
Name	COIA Config Data
Data Type	Domain
Access	ReadWrite
Can be mapped	No

A binary EDS file with a valid CANopenIA-M0 configuration may be written to this entry. At the end of the write transfer, the CANopenIA-M0 generates emergency messages to indicate the progress of storing the file in EEPROM:

EMCY code FF00h, “WAIT ” in manufacturer specific bytes Transfer of setup file into RAM completed, file contains a valid configuration, programming the EEPROM started.

EMCY code FF01h, “FAIL1” in manufacturer specific bytes
Checksum failure (CRC does not match), EEPROM is now erased.

EMCY code FF02h, “FAIL2” in manufacturer specific bytes
Illegal setup, file does not contain a usable setup, EEPROM is now erased.

EMCY code FF02h, “FAIL3” in manufacturer specific bytes
EEPROM programming failure, EEPROM is now erased.

EMCY code 0000h, “OVER ” in manufacturer specific bytes
Programming the EEPROM completed successfully, new setup will be used after next reset.

Read Digital Input 8-bit (0x6000)

Subindex	0x00
Name	Number of Elements
Data Type	Unsigned8
Access	Const
Can be mapped	No

Default Value	0x08
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Subindex	0x01
Name	DigInput8_1
Data Type	Unsigned8
Access	ReadOnly
Can be mapped	Yes

Subindex	0x02
Name	DigInput8_2
Data Type	Unsigned8
Access	ReadOnly
Can be mapped	Yes

Subindex	0x03
Name	DigInput8_3
Data Type	Unsigned8
Access	ReadOnly
Can be mapped	Yes

Subindex	0x04
Name	DigInput8_4
Data Type	Unsigned8
Access	ReadOnly
Can be mapped	Yes

Subindex	0x05
Name	DigInput8_5
Data Type	Unsigned8
Access	ReadOnly
Can be mapped	Yes

Subindex	0x06
Name	DigInput8_6
Data Type	Unsigned8
Access	ReadOnly
Can be mapped	Yes

Subindex	0x07
Name	DigInput8_7
Data Type	Unsigned8
Access	ReadOnly
Can be mapped	Yes

Subindex	0x08
Name	DigInput8_8
Data Type	Unsigned8
Access	ReadOnly

Can be mapped	Yes
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Polarity Digital Input (0x6002)

Subindex	0x00
Name	Highest Subindex
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x07

Subindex	0x01
Name	Polarity Digital Input 1
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x02
Name	Polarity Digital Input 2
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x03
Name	Polarity Digital Input 3
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x04
Name	Polarity Digital Input 4
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x05
Name	Polarity Digital Input 5
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x06
Name	Polarity Digital Input 6
Data Type	Unsigned8

Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x07
Name	Polarity Digital Input 7
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Write Digital Output 8-bit (0x6200)

Subindex	0x00
Name	Number of Elements
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x08

Subindex	0x01
Name	DigOutput8_1
Data Type	Unsigned8
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x02
Name	DigOutput8_2
Data Type	Unsigned8
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x03
Name	DigOutput8_3
Data Type	Unsigned8
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x04
Name	DigOutput8_4
Data Type	Unsigned8
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x05
Name	DigOutput8_5
Data Type	Unsigned8
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x06
Name	DigOutput8_6
Data Type	Unsigned8
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x07
Name	DigOutput8_7
Data Type	Unsigned8
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x08
Name	DigOutput8_8
Data Type	Unsigned8
Access	ReadWriteWrite
Can be mapped	Yes

Polarity Digital Output (0x6202)

Subindex	0x00
Name	Highest Subindex
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x08

Subindex	0x01
Name	Polarity Digital Output 1
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x02
Name	Polarity Digital Output 2
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x03
Name	Polarity Digital Output 3
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x04
Name	Polarity Digital Output 4
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x05
Name	Polarity Digital Output 5
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x06
Name	Polarity Digital Output 6
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x07
Name	Polarity Digital Output 7
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x08
Name	Polarity Digital Output 8
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Error Mode Output (0x6206)

Subindex	0x00
Name	Highest Subindex
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x08

Subindex	0x01
Name	Error Mode Output 1
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No

Default Value	0xFF
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Subindex	0x02
Name	Error Mode Output 2
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0xFF

Subindex	0x03
Name	Error Mode Output 3
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0xFF

Subindex	0x04
Name	Error Mode Output 4
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0xFF

Subindex	0x05
Name	Error Mode Output 5
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0xFF

Subindex	0x06
Name	Error Mode Output 6
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0xFF

Subindex	0x07
Name	Error Mode Output 7
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0xFF

Subindex	0x08
Name	Error Mode Output 8
Data Type	Unsigned8
Access	ReadWrite

Can be mapped	No
Default Value	0xFF

Error Value Output (0x6207)

Subindex	0x00
Name	Highest Subindex
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x08

Subindex	0x01
Name	Error Value Output 1
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x02
Name	Error Value Output 2
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x03
Name	Error Value Output 3
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x04
Name	Error Value Output 4
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x05
Name	Error Value Output 5
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x06
Name	Error Value Output 6

Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x07
Name	Error Value Output 7
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Subindex	0x08
Name	Error Value Output 8
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No
Default Value	0

Read Analog Input 16-bit (0x6401)

Subindex	0x00
Name	Number of elements
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x0C

Subindex	0x01
Name	AnalogInput16_1
Data Type	Unsigned16
Access	ReadOnly
Can be mapped	Yes

Subindex	0x02
Name	AnalogInput16_2
Data Type	Unsigned16
Access	ReadOnly
Can be mapped	Yes

Subindex	0x03
Name	AnalogInput16_3
Data Type	Unsigned16
Access	ReadOnly
Can be mapped	Yes

Subindex	0x04
Name	AnalogInput16_4
Data Type	Unsigned16

Access	ReadOnly
Can be mapped	Yes

Subindex	0x05
Name	AnalogInput16_5
Data Type	Unsigned16
Access	ReadOnly
Can be mapped	Yes

Subindex	0x06
Name	AnalogInput16_6
Data Type	Unsigned16
Access	ReadOnly
Can be mapped	Yes

Subindex	0x07
Name	AnalogInput16_7
Data Type	Unsigned16
Access	ReadOnly
Can be mapped	Yes

Subindex	0x08
Name	AnalogInput16_8
Data Type	Unsigned16
Access	ReadOnly
Can be mapped	Yes

Subindex	0x09
Name	AnalogInput16_9
Data Type	Unsigned16
Access	ReadOnly
Can be mapped	Yes

Subindex	0x0A
Name	AnalogInput16_A
Data Type	Unsigned16
Access	ReadOnly
Can be mapped	Yes

Subindex	0x0B
Name	AnalogInput16_B
Data Type	Unsigned16
Access	ReadOnly
Can be mapped	Yes

Subindex	0x0C
Name	AnalogInput16_C
Data Type	Unsigned16

Access	ReadOnly
Can be mapped	Yes

Write Analog Output 16-bit (0x6411)

Subindex	0x00
Name	Number of elements
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x0C

Subindex	0x01
Name	AnalogOutput16_1
Data Type	Integer16
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x02
Name	AnalogOutput16_2
Data Type	Integer16
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x03
Name	AnalogOutput16_3
Data Type	Unsigned16
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x04
Name	AnalogOutput16_4
Data Type	Unsigned16
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x05
Name	AnalogOutput16_5
Data Type	Integer16
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x06
Name	AnalogOutput16_6
Data Type	Integer16
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x07
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Name	AnalogOutput16_7
Data Type	Integer16
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x08
Name	AnalogOutput16_8
Data Type	Integer16
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x09
Name	AnalogOutput16_9
Data Type	Integer16
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x0A
Name	AnalogOutput16_A
Data Type	Integer16
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x0B
Name	AnalogOutput16_B
Data Type	Integer16
Access	ReadWriteWrite
Can be mapped	Yes

Subindex	0x0C
Name	AnalogOutput16_C
Data Type	Integer16
Access	ReadWriteWrite
Can be mapped	Yes

Analog Output Error Mode (0x6443)

Subindex	0x00
Name	Highest Subindex
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x04

Subindex	0x01
Name	Analog Output Error Mode 1
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No

Subindex	0x02
Name	Analog Output Error Mode 2
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No

Subindex	0x03
Name	Analog Output Error Mode 3
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No

Subindex	0x04
Name	Analog Output Error Mode 4
Data Type	Unsigned8
Access	ReadWrite
Can be mapped	No

Analog Output Error Value (0x6444)

Subindex	0x00
Name	Highest Subindex
Data Type	Unsigned8
Access	Const
Can be mapped	No
Default Value	0x04

Subindex	0x01
Name	Analog Output Error Value 1
Data Type	Unsigned16
Access	ReadWrite
Can be mapped	No

Subindex	0x02
Name	Analog Output Error Value 2
Data Type	Unsigned16
Access	ReadWrite
Can be mapped	No

Subindex	0x03
Name	Analog Output Error Value 3
Data Type	Unsigned16
Access	ReadWrite
Can be mapped	No

Subindex	0x04
Name	Analog Output Error Value 4
Data Type	Unsigned16

Access	ReadWrite
Can be mapped	No