TEST & MEASUREMENT & AUTOMATION / COMIZOA

EPS Software Reference Manual



8CHANNEL ANALOG INPUT MODULE EPS-AI08H (v1.00)

MAY 2015 ©2015 COMIZOA, All rights reserved

COMputer Innovation is Zoomed by Our Affection



Table Of Contents

1 EtherCAT Object

1.1	PDO Mapping ······1
1.2	Standard SDO Object2
1.3	Specific SDO Object



1. EtherCAT Object

1.1 PDO Mapping

Index	Туре	Value	Name	Bit Len	Data Type
		0x6000 : 01	Underrange	1	BOOL
		0x6000 : 02	Overrange	1	BOOL
		0x6000 : 03	Limit1	2	BIT2
		0x6000:04	Limit2	2	BIT2
0x1A00	AI Ch.0	0x6000 : 05	Error	1	BOOL
		-	Reserved	7	-
		0x6000 : 15	TxPDO State	1	BOOL
		0x6000 : 16	TxPDO Toggle	1	BOOL
		0x6000 : 17	Value	32	INT32
0x1A01	AI Ch.1	-	-	-	-
0x1A02	AI Ch.2	-	-	-	-
0x1A03	AI Ch.3	-	-	-	-
0x1A04	AI Ch.4	-	-	-	-
0x1A05	AI Ch.5	-	-	-	-
0x1A06	AI Ch.6	-	-	-	-
0x1A07	AI Ch.7	-	-	-	-
0x1A10	Board Temp	0x6100 : 00	Value	32	UINT32



■ 1.2 Standard SDO Object

Index	SubIndex	Name	Value	Data Type	Flags
0x1000	-	Device type	0x012C1389	UINT32	RO
0x1008	-	Device name	EPS-AI08IH	STRING	RO
0x1009	X1009 - Hardware version		-	STRING	RO
0x100A - S		Software version	-	STRING	RO
	0	Identity	4	UINT8	RO
	1	Vendor ID	0xAAAAAAA	UINT32	RO
0x1018	2	Product code	0x50321248	UINT32	RO
	3	Revision	-	UINT32	RO
	4	Serial number	-	UINT32	RO
	0	Sync manager type	4	UINT8	RO
	1	SubIndex 001	0x01(1)	UINT32	RO
0x1C00	2	SubIndex 002	0x02(2)	UINT32	RO
	3	SubIndex 003	0x03(3)	UINT32	RO
	4	SubIndex 004	0x04(4)	UINT32	RO
0x1C12	0	RxPDO assign	0	UINT8	RO
	0	TxPDO assign	4	UINT8	RO
	1	SubIndex 001	0x1A00	UINT16	RO
	2	SubIndex 002	0x1A01	UINT16	RO
	3	SubIndex 003	0x1A02	UINT16	RO
0.4612	4	SubIndex 004	0x1A03	UINT16	RO
0x1C13	5	SubIndex 005	0x1A04	UINT16	RO
	6	SubIndex 006	0x1A05	UINT16	RO
	7	SubIndex 007	0x1A06	UINT16	RO
	8	SubIndex 008	0x1A07	UINT16	RO
	9	SubIndex 009	0x1A10	UINT16	RO
	0	TxPDO Mapping	9	UINT8	RO
	1	SubIndex 001	0x6000:01, 1	UINT32	RO
	2	SubIndex 002	0x6000:02, 1	UINT32	RO
	3	SubIndex 003	0x6000:03, 2	UINT32	RO
0x1A0n	4	SubIndex 004	0x6000:04, 2	UINT32	RO
(n = 0~7)	5	SubIndex 005	0x6000:05, 1	UINT32	RO
	6	SubIndex 006	0x0000:00, 0	UINT32	RO
	7	SubIndex 007	0x6000:0E, 1	UINT32	RO
	8	SubIndex 008	0x6000:0F, 1	UINT32	RO
	9	SubIndex 009	0x6000:11, 32	UINT32	RO
0x1A10	0	TxPDO Mapping	1	UINT8	RO
UNIAIU	1	Board Temp	0x6100:00, 32	UINT32	RO



1.3 Specific SDO Object

▶ 0x60n0 Analog Channel Input (n = 0~7)

Index	SubIndex	Name		Value	Data Type	Flags
	0	Analog Input		17	UINT8	RO
	1	Underrange	1	전류 : AD Value 4mA이하 전압 : AD Value 0.1V이하	BOOL	RO
	2	Overrange	1	전류 : AD Value 20mA이상 전압 : AD Value 5V이상	BOOL	RO
			0	사용안함		
	3	Limit1	1	AD Value > Limit 1	BIT4	RO
	5	Limit	2	AD Value < Limit 1	D114	ĸŬ
			3	AD Value = Limit 1		
0x60n0			0	사용안함		
(n = 0~7)	4 Limit2	Limit2	1	AD Value > Limit 1	BIT4	RO
		Linitz	2	AD Value < Limit 1		
			3	AD Value = Limit 1		
	5	Error	1	Data Read 실패	BOOL	RO
	E	TxPDO State	AD Chip 동작 상태 반환 AD Data Update시 Toggle		BOOL	RO
	F	TxPDO Toggle			BOOL	RO
	11	Value	입력 받은 전압/전류 값을 표시합니다. Ex) 전압 : Value 2010 = 2.01V 전류 : Value 12340 = 12.34mA		UINT32	RO

▶ 0x6100 Board Temp

Index	SubIndex	Name	Value	Data Type	Flags
0x6100	0	Board Temp	장치 내부 온도를 표시합니다. Ex)Value 4321 = 43.21℃	UINT32	RO



▶ 0x80n0 Analog Input Channel Setting (n = 0~7)

Index	SubIndex	Name	Value		Data Type	Flags
	0	AI Setting		21	UINT8	RO
	1	Enable Limit1		Limit 1 Enable	BOOL	RW
	2	Enable Limit2		Limit 2 Enable	BOOL	RW
	3	Enable User Offset	User Offset 사용 여부		BOOL	RW
0x80n0 (n = 0~7)	9 Analog Typ	Analog Turo	0	Voltage Type	ROOL	RW
(1 - 0-7)	9	Analog Type	1	Current Type	BOOL	
	11	Limit1 Value	Limit1 값		INT32	RW
	12	Limit2 Value	Limit2 값		INT32	RW
	13	User Offset	User Offset 값		INT32	RW

► 0xF001 Setting Save Flag

	Index	SubIndex	Name	Value		Data Type	Flags
		-	Setting Save Flag	AD Set	tting 정보를 Flash에		RO
	0xF001				저장합니다.	UINT16	
				0 → 1	저장 실행		



Software Reference Manual Update List

No.	Version	Date	Changes in
1	1.00	2015.05.27	First Edition

SRC Reference Manual

Copyright holder : COMIZOA CO.,LTD Copyright (c) by COMIZOA CO.,LTD. All right reserved. 2015. 05. 27.



COMIZOA CO.,LTD http://www.comizoa.com Tel) +82 - 42 - 936 - 6500 Fax) +82 - 42 - 936 - 6507

All the details including figures and programs included in this manual is protected by Korean Copyright. Any parts of this manual can be copied or distributed without COMIZOA's permission.

COMputer Innovation is Zoomed by Our Affection