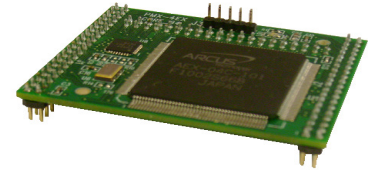


OVERVIEW

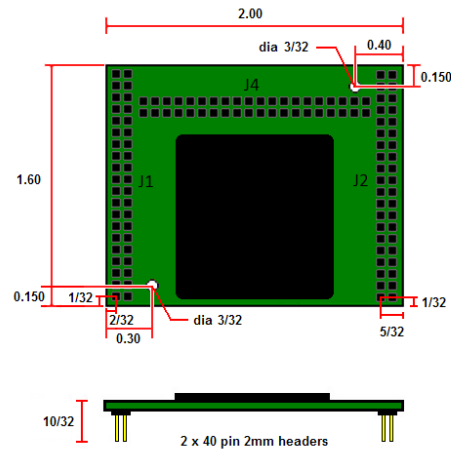
PMX-4EX-CR is a 4-axis motion controller with all the features of our widely known PMX-4EX-SA. Customers can now take advantage of the ease of use that Arcus offers in a package built for cost sensitive OEMs. A full software package has been developed, and will be provided to you – free of charge. The PMX-4EX-CR allows you to reduce your R&D investment when building your own stepper/servo control system. The decision to *buy* instead of *make* has never been easier.



SIZE

* 1.6 x 2.0 x 0.5 inch (40.6 x 50.8 x 12 mm)

DIMENSIONS



CONNECTOR

* 3 x 40 pin 2mm space headers

MOTION CONTROL

- * 6M Pulse output rate
- * Linear interpolation (XYZU)
- * Arc / Circular interpolation (Any two axes)
- * Helix/Tangent interpolation (XYZ)
- * Contouring (XYZ – 45 move buffer size)
- * Electronic gearing
- * External Start/Stop for 5+ axes interpolation
- * Manual Pulsar support for follower mode
- * Closed-loop algorithm (StepNLoop)

DIGITAL IO

- * 4 x Pulse/Dir/Enable outputs
 - * 4 x Home/-Limit/+Limit inputs
 - * 4 x EA/EB/EZ Encoder inputs (differential)
 - * 4 x Dedicated DI
 - * 4 x High speed latch inputs
 - * 4 x Dedicated DO
 - * 24 x Configurable IO
 - * 2 x PWM outputs (open-collector)
- (Note: All digital IO's are TTL 5V Compliant)*

PIN OUT

J1				J2				J4			
VCC	1	2	VCC	VCC	1	2	VCC	VCC	1	2	ESTA
VCC	3	4	VCC	VCC	3	4	VCC	IO1	3	4	IO0
DirX	5	6	PulX	D-	5	6	VBUS	IO3	5	6	IO2
PulY	7	8	EnaX	D+	7	8	/RE	IO5	7	8	IO4
EnaY	9	10	DirY	RxD	9	10	TxD	IO7	9	10	IO6
DirZ	11	12	PulZ	AI1	11	12	AO1	IO9	11	12	IO8
PulU	13	14	EnaZ	LED	13	14	NSS	IO11	13	14	IO10
EnaU	15	16	DirU	SD_DET	15	16	MOSI	IO13	15	16	IO12
DO2	17	18	DO1	SD_WR	17	18	MISO	IO15	17	18	IO14
DO4	19	20	DO3	NC	19	20	SCK	IO17	19	20	IO16
LX+	21	22	-LX	EBx	21	22	EAx	IO19	21	22	IO18
HX	23	24	LTCX	EAY	23	24	EZx	IO21	23	24	IO20
+LY	25	26	-LY	EZY	25	26	EBy	IO23	25	26	IO22
HY	27	28	LTCY	EBz	27	28	EAz	AO2	27	28	NC
LZ+	29	30	-LZ	Eau	29	30	EZz	PWM2	29	30	PWM1
HZ	31	32	LTCZ	EZu	31	32	EBu	PAx	31	32	PBx
LU+	33	34	-LU	DI2	33	34	DI1	PAy	33	34	PBy
HU+	35	36	LTCU	DI4	35	36	DI3	PAz	35	36	PBz
GND	37	38	GND	GND	37	38	GND	PAu	37	38	PBu
GND	39	40	GND	GND	39	40	GND	ESTP	39	40	GND

ANALOG IO

- * 1 channel 10-bit analog input 0 to 3.3V
- * 2 channel 10-bit analog output 0 to 5V

COMMUNICATION

- * USB 2.0
- * RS-485
- * SD Card Interface for mass storage (1 million lines)
- * Can run in both PC-based and stand-alone modes

PROGRAMMING

- * C, C++, VB, VB.net, Linux, Labview, Matlab examples are available
- * Stand-alone programmable
- * Multi-tasking program support
- * BASIC-like text based programming language (AScript)
- * IF/ELSE/WHILE loop control
- * Sub routine support
- * Math function support
- * 50 volatile variables
- * 50 non-volatile variables

POWER

- * 5VDC input 300mA

EVALUATION KIT

