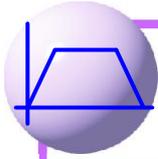




# Bridging the Gap between Real World and Computer



## MPC3042A/AL Wiring Board

ADP2042DIN(N)



ADP2042DIN(P)



ADP2042DIN(R)



### Pin Assignments

EXTG	68	34	EXTG		
YEZ-	67	33	XEZ-		
YEZ+	66	32	XEZ+		
YEB-	65	31	XEB-		
YEB+	64	30	XEB+		
YEA-	63	29	XEA-		
YEA+	62	28	XEA+		
EXTG	61	27	EXTG		
YCCW-	60	26	XCCW-		
YCCW+	59	25	XCCW+		
YCW-	58	24	XCW-		
YCW+	57	23	XCW+		
EXTG	56	22	EXTG		
YERC	55	21	XERC		
YSVON	54	20	XSVON		
YSRDY	53	19	XSRDY		
YALM	52	18	XALM		
YINP	51	17	XINP		
EXTG	50	16	EXTG		
YSTA	49	15	XSTA		
YCMP	48	14	XCMP		
YFIN	47	13	XFIN		
EMG	46	12	EMG		
YPCS	45	11	XPCS		
YSD	44	10	XSD		
YLTC	43	9	XLTC		
YORG	42	8	XORG		
YLS-	41	7	XLS-		
YLS+	40	6	XLS+		
EXTG	39	5	EXTG		
+5Vout	38	4	EXTG		
+5Vout	37	3	EXTG		
EXTG	36	2	+24Vin		
EXTG	35	1	+24Vin		

### Specifications

- ▶ Power Requirement : 24Vdc  $\pm$  4Vdc
- ▶ On Board Build-In s.p.s. : +5Vdc 500mA (Max)
- ▶ General Input : 4 with LED indicators
- ▶ General Output :
  - ADP2042DIN(N) : 4 NMOS (Sink 1A @120Vdc) with LED indicators
  - ADP2042DIN(P) : 4 PMOS (Source 1A @24Vdc) with LED indicators
  - ADP2042DIN(R) : 4 Relays (3A @250Vac or 3A @30Vdc) with LED indicators
- ▶ Connector : 68pin female SCSI-II centronic connector for main card connection
- ▶ Specific Servo Control Connector : 2 D-type 26p (1 per axis)
- ▶ Operation Temperature : 0 °C ~ +70 °C
- ▶ Operation Humidity : 5~95% RH, non-condensed
- ▶ Dimension :
  - ADP2042DIN(N) : 121(W)\*159(L)\*47(H)mm  
4.76(W)\*6.26(L)\*1.85(H)in
  - ADP2042DIN(R)/(P) : 121(W)\*159(L)\*45(H)mm  
4.8(W)\*6.3(L)\*1.8(H)in

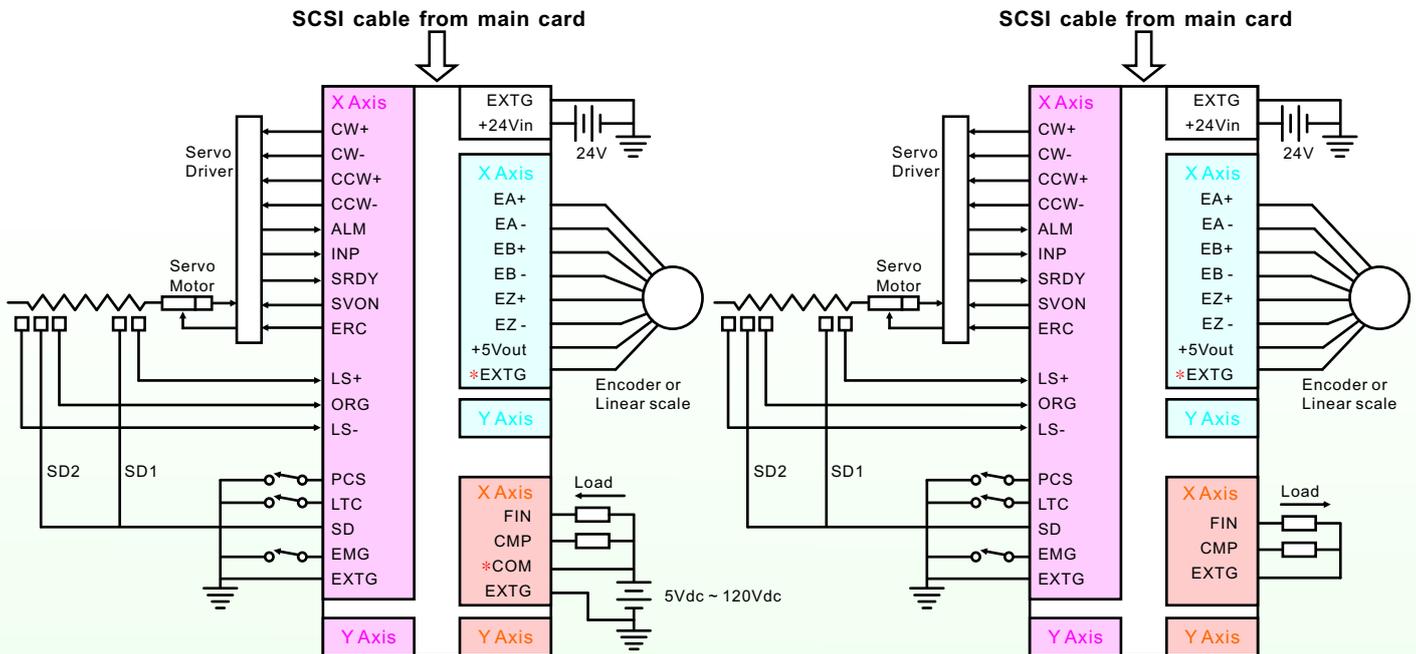
### Matched I/O Card

- ▶ **MPC3042A** : With pulse referenced PI closed loop control. 2-axis Motion Control Card for Servo / Stepping Motor Control (include SM2341104) **P.15**
- ▶ **MPC3042AL** : 2-axis Motion Control Card for Servo / Stepping Motor Control (include SM2341104) Motor Control (include SM2341104) **P.15**



# Bridging the Gap between Real World and Computer

## Wiring Diagram



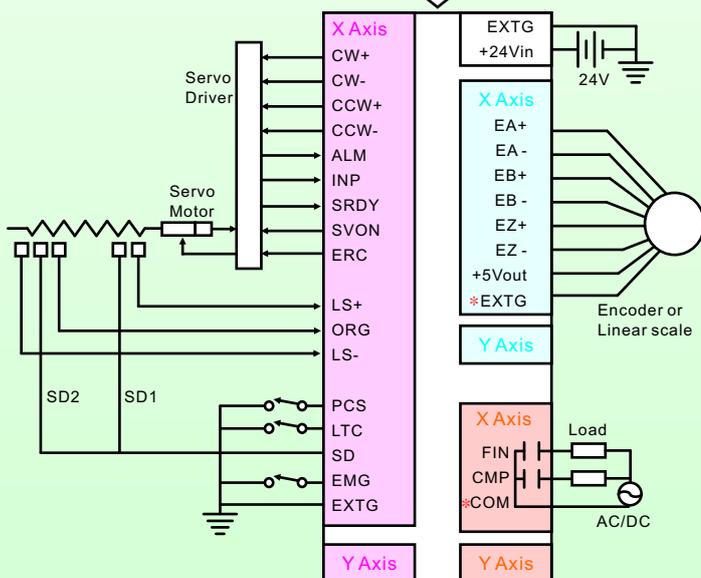
\*Differential signals needs connect EXTG as common.  
 \*COM connect to power supply as free-wheel path to avoid high voltage induced by inductive load.

**ADP2042 DIN(N)**

**ADP2042 DIN(P)**

Pulse Input under various mode			
Input Terminal	Quadrature	Single Pulse	Dual Pulse
EA+	EA+	Clock+	CW+
EA-	EA-	Clock-	CW-
EB+	EB+	Dir+	CCW+
EB-	EB-	Dir-	CCW-
EZ+	EZ+	NA	NA
EZ-	EZ-	NA	NA

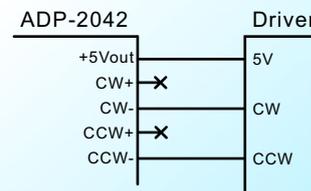
SCSI cable from main card



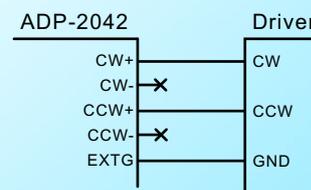
**ADP2042 DIN(R)**

## Application Tips

► Using differential signal to drive single end input driver



( For normally high type single end input, driver will take low as active pulse)



( For normally low type single end input, driver will take high as active pulse)