

## 特色

- 最大支援 32 軸運動控制
- 最大支援 64 從站模組資料讀寫
- 從站模組資料讀寫 (SDO, PDO)
- 單軸自動原點復歸
- 單軸位置、速度運動控制
- 單軸同步運動控制 (E-GEAR, E-CAM)
- 虛擬軸功能
- 多群組運動控制
- 多軸線性插補運動控制
- 2/3 軸圓弧插補運動控制
- 螺旋插補運動控制
- 主卡 DI/DO 功能
- 主卡 Encoder 功能 · 用於比較觸發使用
- 支援 CiA402 驅動器及 ICP DAS 步進馬達驅動器從站模組運動控制操作 API
- 支援 ICP DAS 從站模組 DI/DO, AI/AO 操作 API
- 硬體緊急停止



## 簡介

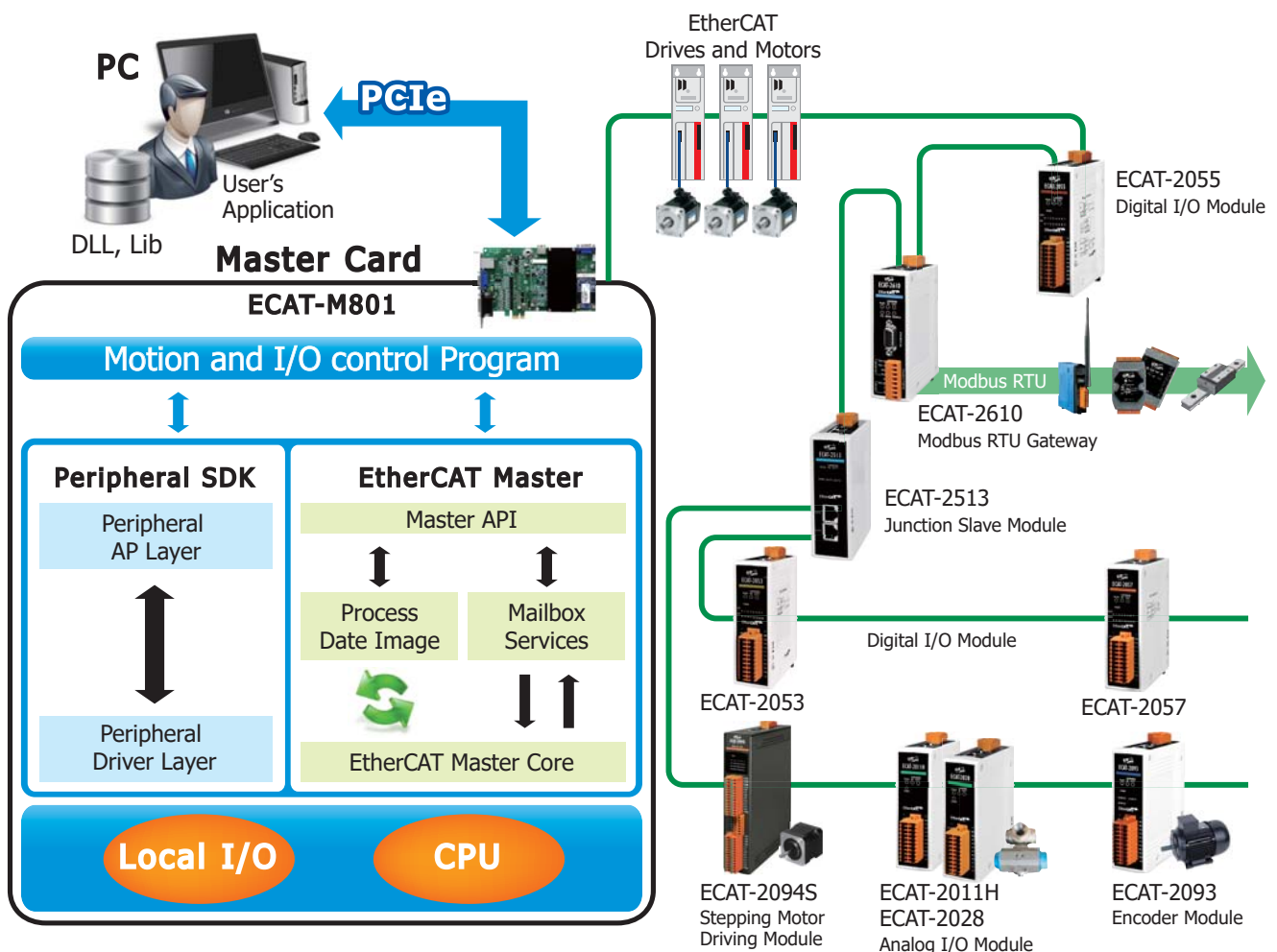
EtherCAT (Ethernet for Control Automation Technology) 是一個開放且高性能的現場總線，它使得 I/O 層也能使用乙太網技術。EtherCAT 具備靈活的佈線、快速的通訊、以及多個不錯的功能。EtherCAT 系統需要一個 Master 來控制多個 Slaves，而泓格科技提供 PC Master 主卡讓用戶建立運動控制應用。Master 主卡可透過內建的 CPU 提供多軸運動和 I/O 控制等功能，可明顯減少 PC 的 CPU 負載。同時，泓格科技也提供多種 I/O Slave 模組供客戶選用，由於 EtherCAT 技術是一種工業標準，因此這些模組可與第三方 EtherCAT Slaves 順利的協同工作。

## 硬體規格

型號	ECAT-M801-8AX	ECAT-M801-16AX	ECAT-M801-32AX
<b>Communication Interface</b>			
Ethernet Port	1 x RJ-45, 100 BASE-TX		
Protocol	EtherCAT		
Data Transfer Medium	Ethernet/EtherCAT Cable (Min. CAT 5), Shielded		
No. of Slave Node	Max. 64		
No. of Motion Control	Max. 8	Max. 16	Max. 32
<b>General</b>			
Bus Type	PCI Express x1		
Connector	RJ45 x1 DB-26 (Female) DB-15 (Female)		
Operating Temperature	05°C~+605°C		
Storage Temperature	-20°C~+70°C		
Humidity	0 ~ 90% RH, Non-condensing		
Dimensions (L x W x D)	192 mm x 135 mm x 21.5 mm		
<b>Digital Output</b>			
Channels	13		
Type	Sink (open collector)		
Load Voltage	+24 V		
Max. Load Current	100 mA/ch		
Isolation Voltage	3000 Vrms		

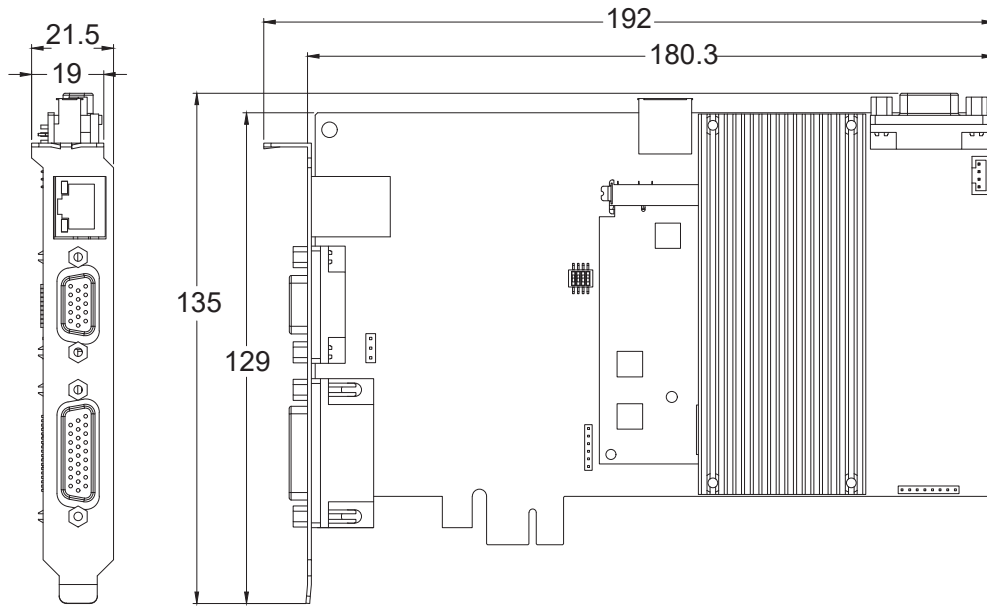
型號	ECAT-M801-8AX	ECAT-M801-16AX	ECAT-M801-32AX
<b>Digital Input</b>			
Channels	13		
Type	Wet (Sink/Source)		
On Voltage Level	+19 V ~ + 24 V		
Off Voltage Level	+11 V Max.		
Isolation Voltage	3000 V		
<b>Encoder</b>			
Axis	2		
Type	Quadrant, CW/CCW, Pulse/Dir.		
Speed, Resolution	1 MHz, 32-bit		
Compare Trigger Output	2-ch		

☑ 應用案例



ECAT-M801

外型尺寸 (單位: mm)

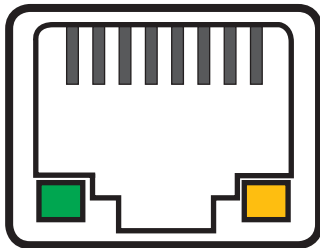


左視圖

前視圖

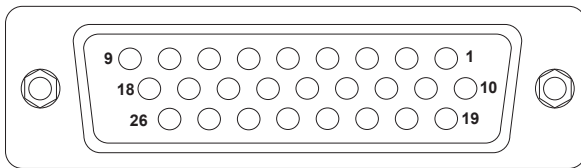
腳位配置

**RJ1**



**CON1**

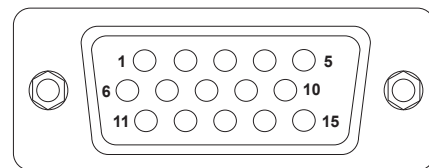
**26-pin Female D-sub Connector**



Pin Number	Pin Assignment	Pin Number	Pin Assignment	Pin Number	Pin Assignment
1	DI0	10	DO0	19	DI8
2	DI1	11	DO1	20	DI9
3	DI2	12	DO2	21	DI10
4	DI3	13	DO3	22	DI11
5	DI4	14	DO4	23	DO8
6	DI5	15	DO5	24	DO9
7	DI6	16	DO6	25	DO10
8	DI7	17	DO7	26	DO11
9	EXT. GND	18	EXT. PWR		

**CON2**

**15-pin Female D-sub Connector**



Pin Number	Pin Assignment	Pin Number	Pin Assignment	Pin Number	Pin Assignment
1	1A-	6	1A+	11	CMP 1+
2	1B-	7	1B+	12	CMP 1-
3	2A-	8	2A+	13	CMP 2+
4	2B-	9	2B+	14	CMP 2-
5	EXT GND	10	DI12	15	DO12

☑ 線路連接

數位輸入通道

Digital Input	Readback as 1	Readback as 0
Sink	+19 ~ +24 VDC 	OPEN or < 11 VDC 
	+19 ~ +24 VDC 	OPEN or < 11 VDC 

數位輸出通道

Digital Output	ON State Readback as 1	OFF State Readback as 0
Driver Relay		
Resistance Load		

編碼器

Counter Type	Counter Type	Counter Type
A/B Phase 	CW/CCW 	Pulse/Dir 

☑ 訂購訊息

<b>ECAT-M801-8AX</b>	EtherCAT Master, Max. 8-Axis Synchronously, 13-channel Digital I/O, 2-Axis Encoder
<b>ECAT-M801-8AX/S</b>	EtherCAT Master, Max. 8-Axis Synchronously, 13-channel Digital I/O, 2-Axis Encoder Including a DN-26, a CA-1515M and a CA-2615M
<b>ECAT-M801-16AX</b>	EtherCAT Master, Max. 16-Axis Synchronously, 13-channel Digital I/O, 2-Axis Encoder
<b>ECAT-M801-16AX/S</b>	EtherCAT Master, Max. 16-Axis Synchronously, 13-channel Digital I/O, 2-Axis Encoder Including a DN-26, a CA-1515M and a CA-2615M
<b>ECAT-M801-32AX</b>	EtherCAT Master, Max. 32-Axis Synchronously, 13-channel Digital I/O, 2-Axis Encoder
<b>ECAT-M801-32AX/S</b>	EtherCAT Master, Max. 32-Axis Synchronously, 13-channel Digital I/O, 2-Axis Encoder Including a DN-26, a CA-1515M and a CA-2615M

☑ 可選配件

<b>DN-26</b>	15-pin and 26-pin Din-Rail mounting I/O connector board
<b>CA-1515M</b>	DB-15 Male (D-sub) to DB-15 Male (D-sub) cable. 1.5 M (180°)
<b>CA-2615M</b>	DB-26 Male (D-sub) to DB-26 Male (D-sub) cable. 1.5 M (180°)