

## 36 pin Centronics Male Connector 36 Pin Centronic Connector Pin Out

Pin #	Pin Name	Pin Description and Function	
1	/STROBE	Data Strobe (May be called /PSTROBE, HostCLK)	
2	D0	Data Bit 0	
3	D1	Data Bit 1	
4	D2	Data Bit 2	
5	D3	Data Bit 3	
6	D4	Data Bit 4	
7	D5	Data Bit 5	
8	D6	Data Bit 6	
9	D7	Data Bit 7	
10	/ACK	Acknowledge receipt of Data (or /PACK, PtrCLK)	
11	BUSY	Strobe received, Waiting on Acknowledge (or /PBUSY, PtrBusy)	
12	PAPER ERROR	Paper Out / Paper Error (AckDataReq)	
13	SELECT Out	Daisy-Chain Device Select Signal (May be tied high in some Printers)	
14	/AUTOFEED	Auto-Feed paper, Not used with PostScript printer (HostBusy)	
15	Select IN	Daisy-Chain IN	
16	Signal GND	Logic Ground	
17	CHASSIS GND	Shield Ground	
18	+5 V PULLUP	+5 V DC (50 mA max)	
19		Signal Ground (Strobe Ground)	
20		Signal Ground (Data 0 Ground)	
21		Signal Ground (Data 1 Ground)	
22		Signal Ground (Data 2 Ground)	
23		Signal Ground (Data 3 Ground)	
24	GND	Signal Ground (Data 4 Ground)	
25		Signal Ground (Data 5 Ground)	
26		Signal Ground (Data 6 Ground)	
27		Signal Ground (Data 7 Ground)	
28		Signal Ground (Acknowledge Ground)	
29		Signal Ground (Busy Ground)	
30	/GNDRESET	Reset Ground	
31	/RESET	Cancel Current Job (May be called /PRIME)	
32	/FAULT	Fault with Printer (Low when offline)	
33	0 V	Signal Ground	
34	n/c	Not used	
35	+5 V	+5 V DC	
36	/SLCT IN	Select In; Taking low or high sets printer on line or off line	

## **Functional Description**

STROBE: Active low pulse used to transfer data Pulse with must be between 0.5 and into the printer. 500 microseconds for most printers. Dn: Data lines, high is a one. ACK: Active low pulse indicates that data has been received and the printer is ready to accept more. **BUSY:** A high signal indicates that the printer cannot receive data. PE: A high signal indicates that the printer is out of paper (Paper End) SELECT A high signal indicates that the printer is OUT: on-line **AUTO** A low signal indicates to the printer that This signal is used as a ground line FEED: a line feed is required after each by some manufacturers. Carriage return. A 100-200 KHz signal used by true OSCXT: Centronics printers only. +5V: +5Vdc Not provided by all manufacturers A low signal resets the printer to its PRIME: power-up state and the printer buffer is cleared **FAULT:** A low signal indicates that the printer is in an off-line or error state LINE Used by true Centronics printers only. Most of the time not used COUNT:

A high signal indicates to the printer that This signal is used by a few

manufacturers

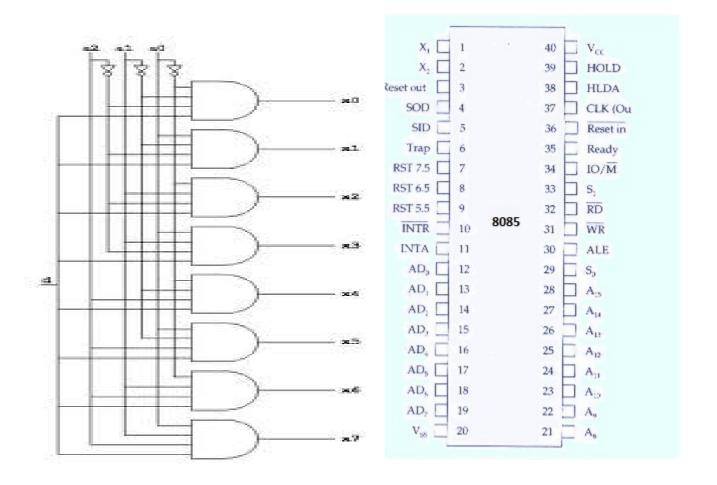
Note: Direction is Printer relative Computer

a DC1/ DC3 code is valid.

SELECT

IN:

10 9 8 7 6	PIN NO.	E MAN6960
	1	Cathode E
	2	Cathode D
1 // ///	3	Com. Anode
14-41	4	Cathode C
	5	Cathode D.P.
1/I = II = I	6	Cathode B
16-00	7	Cathode A
	8	Com. Anode
	9	Cathode F
12345	10	Cathode G



PC4 TIMER IN RESET PC5 PC5 PB7 TIMEROUT IO/M PB6 CE (CE IN 8156) PB4 RD RD RD RD PB3 WR 8155 PB2 ALE AD0 AD1 PA7 AD2 AD2 PA6 AD3 AD4 AD4 AD5 AD4 AD6 AD7 Vss PA0	PC3		Vcc
RESET PC0 PB7 TIMEROUT PB6 IO/M PB5 CE (CE IN 8156) RD PB3 WR 8155 PB2 ALE AD0 PB0 AD1 PA7 AD2 PA6 AD3 PA5 AD4 PA4 AD5 AD4 AD5 PA2 AD6 AD7 PA2 PA1	PC4		PC2
PC5 TIMEROUT IO/M PB6 PB7 PB6 PB8 PB4 PB3 PB3 PB2 ALE AD0 AD1 AD2 AD2 AD3 AD4 AD5 AD4 AD5 AD4 AD5 AD6 AD7 AD7 PA7	TIMER IN		PC1
TIMEROUT PB6 IO/M PB5 CE (CE IN 8156) PB4 RD PB3 WR 8155 PB2 ALE AD0 PB0 AD1 PA7 AD2 PA6 AD3 PA5 AD4 PA4 AD6 PA3 AD6 PA3 AD6 PA2 AD7	RESET		PC0
IO/M PB5 CE (CE IN 8156) PB4 RD PB3 WR 8155 PB2 ALE PB1 AD0 PB0 AD1 PA7 AD2 PA6 AD3 PA5 AD4 PA4 AD5 PA3 AD6 PA2 AD7 PA1	PC5		PB7
CE (CE IN 8156)       PB4         RD       PB3         WR       8155       PB2         ALE       PB1         AD0       PB0         AD1       PA7         AD2       PA6         AD3       PA5         AD4       PA4         AD5       PA3         AD6       PA2         AD7       PA1	TIMEROUT		PB6
RD       PB3         WR       8155       PB2         ALE       PB1         AD0       PB0         AD1       PA7         AD2       PA6         AD3       PA5         AD4       PA4         AD5       PA3         AD6       PA2         AD7       PA1	10/ <u>M</u>		PB5
RD       PB3         WR       8155       PB2         ALE       PB1         AD0       PB0         AD1       PA7         AD2       PA6         AD3       PA5         AD4       PA4         AD5       PA3         AD6       PA2         AD7       PA1	CE (CE IN 8156)		PB4
ALE PB1 AD0 PB0 AD1 PA7 AD2 PA6 AD3 PA5 AD4 PA4 AD5 PA3 AD6 PA2 AD7 PA1			PB3
AD0 PB0 AD1 PA7 AD2 PA6 AD3 PA5 AD4 PA4 AD5 PA3 AD6 PA2 AD7 PA1	WR	8155	PB2
AD1 PA7 AD2 PA6 AD3 PA5 AD4 PA4 AD5 PA3 AD6 PA2 AD7 PA1	ALE		PB1
AD2 PA6 AD3 PA5 AD4 PA4 AD5 PA3 AD6 PA2 AD7 PA1	AD0		PB0
AD3 PA5 AD4 PA4 AD5 PA3 AD6 PA2 AD7 PA1	AD1		PA7
AD4 PA4 AD5 PA3 AD6 PA2 AD7 PA1	AD2		PA6
AD6 PA3 AD6 PA2 AD7 PA1	AD3		PA5
AD6 PA2 AD7 PA1	AD4		PA4
AD7 PA1	AD5		PA3
	AD6		PA2
Vss PA0	AD7		PA1
	Vss		PA0

AD0-AD7	I/O	Addr/Data bus mux'd
RESET	I	Reset input
CE-bar or CE	I	Chip enable (55/56)
ALE	I	Address latch enable
RD-bar	I	Read input
WR-bar	I	Write input
IO/Mbar	I	I/O or memory section
PA0-7	I/O	Port A (8 bit)
PB0-7	I/O	Port B (8 bit)
PC0-5	I/O	Port C (6 bit)
TIMER-IN	I	Timer input
TIMER-OUT-bar	0	Timer output

