# SS30-PT-S


# User's Manual


**Copyright 2024**


# Peripheral Technology


Last update 2/19/2024

# SS30-PT-S

The PT-S is a replacement board for the SWTPC MP-S serial board.  The PT-S has connectors for RS232 using DB-9 male and female as well as the molex connector used by the original SWTPC MP-S board. Only one of the connectors can be used at a time. The multiple choices are for making it more convenient to connect an RS232 between the PT-S and your terminal device.  The DB-9 connectors are setup to use USB to RS232 cables to connect the MP-S to a PC using a terminal program.  USB to DB-9 cables are available from many sources including eBay and AMAZON and typically sell for a little over $10.  One cable we have used is sold on AMAZON and described as:

CableCreation USB to RS232 Adapter with PL2303 Chipset.

## Baud Rates

The baud rate is set by a jumper on JP10.  Only one jumper should be installed.  It's possible the baud rates marked on the board don't match what your system actually produces. Many systems redefine the original baud rates, often to higher baud rate than were originally used.

## IRQ

JP7 is to enable IRQ's.  On FLEX systems IRQ is not normally needed and can be left un-jumpered.  When running OS9, JP7 must be jumpered.
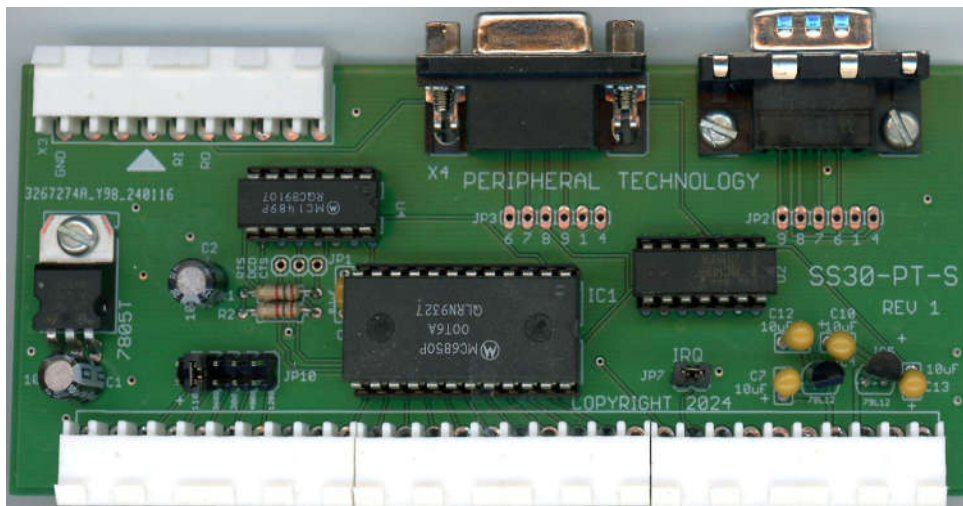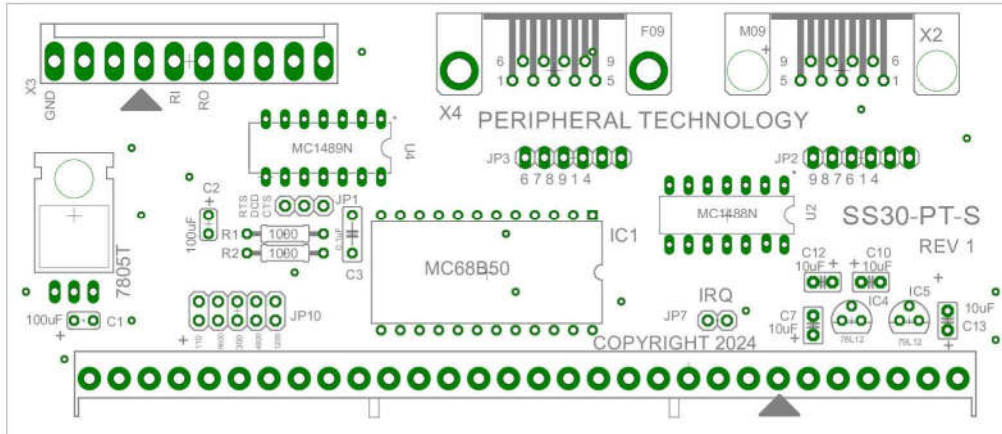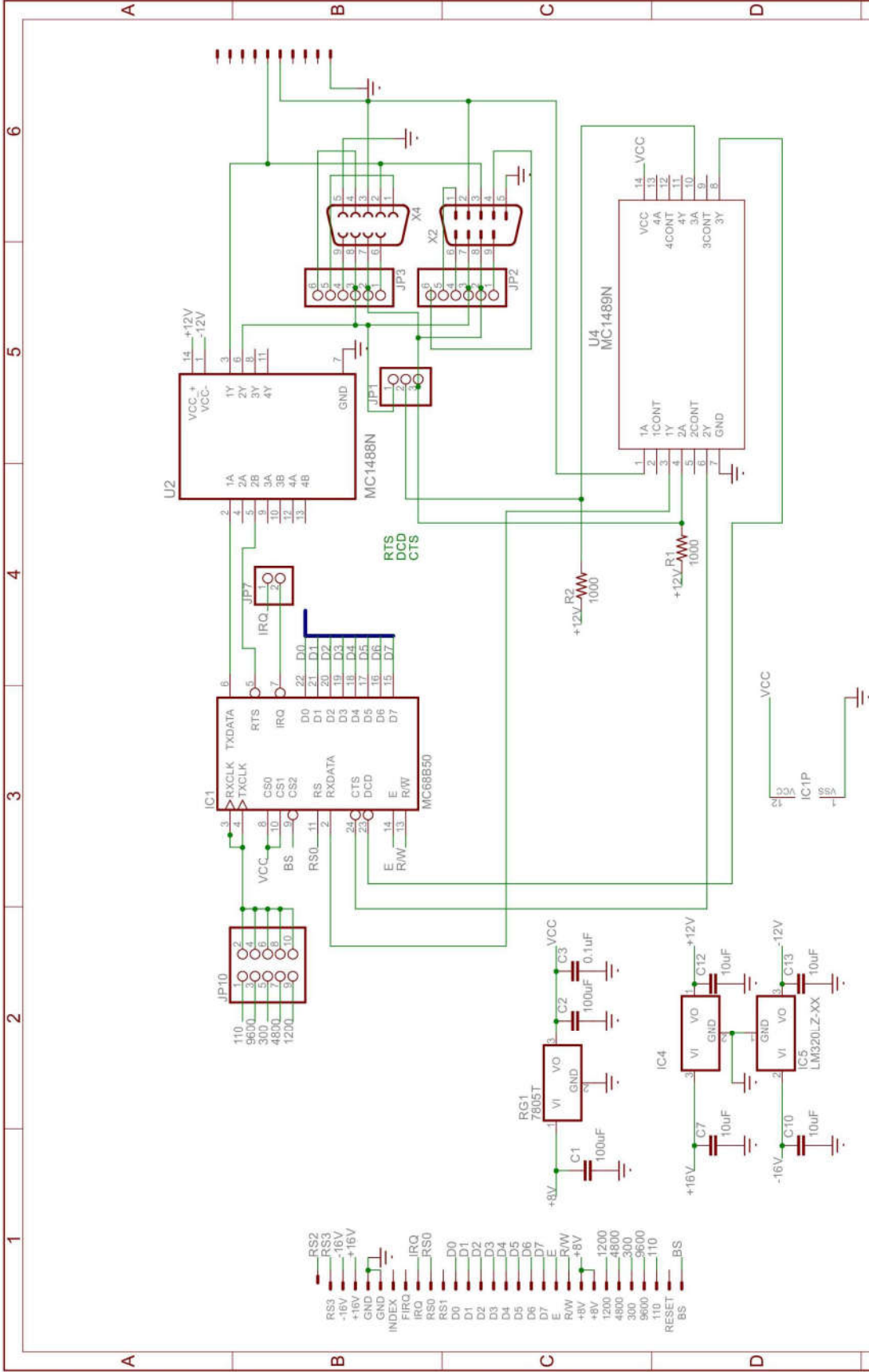
## Installation

The MP-S is installed in slot 1 for a 6800 system and slot 0 for a 6809 system.  This assumes 4 addresses per slot for the 6800 and 16 addresses per slot for the 6809 system.

# Parts List SS30-PT-S

```
=====================================================
```
Quantity        Designation    Description
```
=====================================================
```

| Quantity | Designation | Description |
|---|---|---|
| 1 | R1-R2 | 1000 1/4 Watt Resistor |
| 2 | C1,C2 | 100uF 16 V Electrolytic Capacitor |
| 1 | C3 | 0.1uF ceramic Capacitor |
| 4 | C7,C10,C11 C13 | 10uF Tantalum 16V Capacitor |
| 1 | IC1 | MC6850  MC68B50 for 2MHZ systems |
| 1 | U2 | 1488 |
| 1 | U4 | 1489 |
| 1 | IC4 | 78L12 |
| 1 | IC5 | 79L12 |
| 1 |  | 7805 |
|  |  | Hardware, #4 screw, washer, nut to attach 7805 |
| 1 |  | 24 pin IC socket |
| 2 |  | 14 pin IC socket |
| 1 | JP7 | 1x2 header strip |
| 1 | JP10 | 2x5 header strip |
| 1 | X4 | DB-9F right angle connector |
| 1 | X2 | DB-9M right angle connector |
| 1 |  | Shorting Plug |
| 2 |  | Index Pin for Molex Connector  Molex 0015040219 |
| 4 |  | Molex Connector  - **0009482101** |
| 1 |  | SS30-MP-S |

# Parts Placement SS30-PT-S

## Peripheral Technology

TITLE: PT-SS30-RS232

Document Number:

REV: 1

Date: not saved!

Sheet: 1/1

U2 MC1488N

U4 MC1489N

IC1 MC68B50

RG1 7805T

IC4

IC5 LM320LZ-XX

JP1  JP2  JP3  JP7  JP10

X2  X4

RS2 RS3 -16V +16V GND INDEX FIRQ IRQ RS0 RS1 D0 D1 D2 D3 D4 D5 D6 D7 E R/W +8V +8V 1200 4800 300 9600 110 RESET BS

RTS DCD CTS

+12V -12V VCC