# AN INTRODUCTION TO
# KW-508 TWO PARALLEL PRINTER CARD

## GENERAL DESCRIPTION

KW-508 two parallel printer card provides two interface between the 8088/80286/80386/80486 based personal computer and parallel device such as the parallel printer.
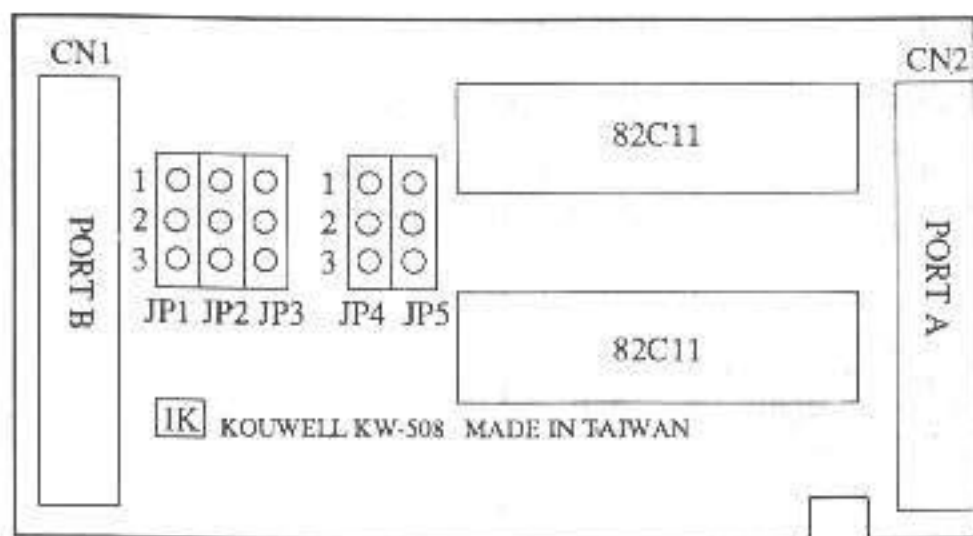
## BOARD LAYOUT



Figure 1 Board Layout of KW-508

## PARALLEL PORT BASE ADDRESS

The two parallel ports can be hardware assigned to the three I/O addresses, They are:

LPT1: 3BC Hex
LPT2: 378 Hex
LPT3: 278 Hex

The 3-pin jumper blocks JP1, JP2 and JP3 on your KW-508, you will find a pair of jumper plugs for selecting LPTs. Pin 1 & 2 are associated with parallel PORT B (CN1) and Pin 2 & 3 are associated with parallel PORT A (CN2) on these jumper blocks. The jumper setting is shown as following:

A> For port A (CN2)
    (25-pin D-type connector)

B> For port B (CN1)
    (26-pin head pin connector)

| Jumper I/O address | JP1 Pin (2, 3) | JP2 Pin (2, 3) | JP3 Pin (2, 3) |
|---|---|---|---|
| 3BCH | — | — | short |
| 378H | — | short | — |
| 278H | short | — | — |
| Disable | — | — | — |

| Jumper I/O address | JP1 Pin (1, 2) | JP2 Pin (1, 2) | JP3 Pin (1, 2) |
|---|---|---|---|
| 3BCH | — | — | short |
| 378H | — | short | — |
| 278H | short | — | — |
| Disable | — | — | — |

"short" represent the subjected jumper is to be shorted by a shorting plug.

" — " represent the subjected jumper is in open circuit.

## PARALLEL PORT IRQ LEVEL

The two parallel ports can be hardware assigned to the two IRQ levels, They are:

IRQ5
IRQ7

The 3-pin jumper blocks JP4 and JP5 on your KW-508 are for setting parallel port A or B among IRQ5 or IRQ7. The jumper setting is shown as following:
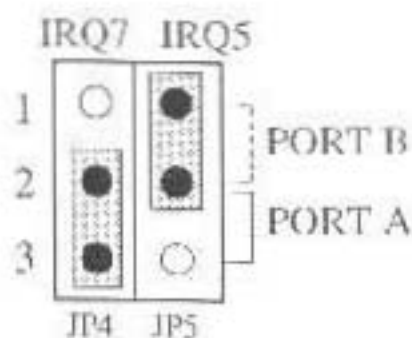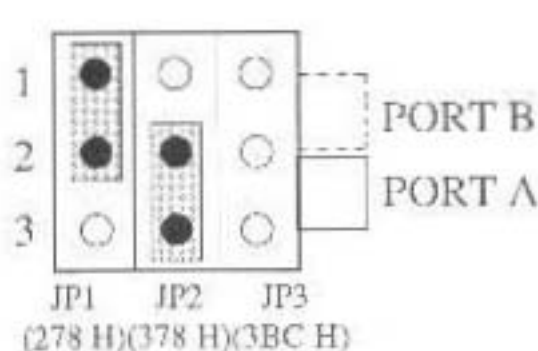
A> For port A (CN2)  B> For port B (CN1)

| Jumper IRQ | JP4 Pin (2, 3) | JP5 Pin (2, 3) | Jumper IRQ | JP4 Pin (1, 2) | JP5 Pin (1, 2) |
|---|---|---|---|---|---|
| IRQ7 | short | — | IRQ7 | short | — |
| IRQ5 | — | short | IRQ5 | — | short |

"short" represent the subjected jumper is to be shorted by a shorting plug.

" — " represent the subjected jumper is in open circuit.

## FACTORY SETTING



JP1    JP2    JP3
(278 H)(378 H)(3BC H)

IRQ7  IRQ5
JP4  JP5

Note: Rectangle represents short-circuiting

# PINOUTS OF THE PARALLEL PORT A (CN2)

The following diagram details the pin assignment of signals at the 25-pin parallel port connector (CN2):

| PIN | SIGNAL | IN/OUT |
|-----|--------|--------|
| 1 | –STROBE | OUT |
| 2 | DATA BIT 0 | OUT |
| 3 | DATA BIT 1 | OUT |
| 4 | DATA BIT 2 | OUT |
| 5 | DATA BIT 3 | OUT |
| 6 | DATA BIT 4 | OUT |
| 7 | DATA BIT 5 | OUT |
| 8 | DATA BIT 6 | OUT |
| 9 | DATA BIT 7 | OUT |
| 10 | –ACK | IN |
| 11 | BUSY | IN |
| 12 | PE | IN |
| 13 | SLCT | IN |
| 14 | –AUTO FEED XT | OUT |
| 15 | –ERROR | IN |
| 16 | –INIT | IN |
| 17 | –SLCT IN | OUT |
| 18-25 | GND | – |

# PINOUTS OF THE PARALLEL PORT B (CN1)

The following diagram details the pin assignment of signals at the 26-pin parallel port connector (CN1):

| PIN | SIGNAL | IN/OUT |
|-----|--------|--------|
| 1 | –STROBE | OUT |
| 2 | DATA BIT 0 | OUT |
| 3 | DATA BIT 1 | OUT |
| 4 | DATA BIT 2 | OUT |
| 5 | DATA BIT 3 | OUT |
| 6 | DATA BIT 4 | OUT |
| 7 | DATA BIT 5 | OUT |
| 8 | DATA BIT 6 | OUT |
| 9 | DATA BIT 7 | OUT |
| 10 | –ACK | IN |
| 11 | BUSY | IN |
| 12 | PE | IN |
| 13 | SLCT | IN |
| 14 | –AUTO FEED XT | OUT |
| 15 | –ERROR | IN |
| 16 | –INIT | IN |
| 17 | –SLCT IN | OUT |
| 18-25 | GND | – |
| 26 | NC | |