

NetDCU-ADP/TX2

Hardware

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Table of Contents

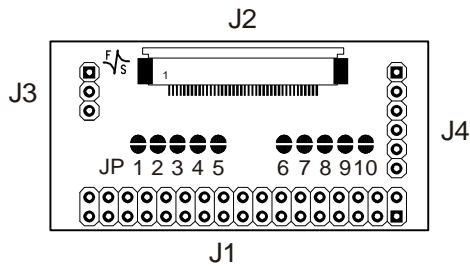
| | | |
|----------|---|----------|
| 1 | Overview | 1 |
| 2 | Arrangement of Connectors | 1 |
| 3 | Connectors | 2 |
| 3.1 | Counting of the connector pins | 2 |
| 3.2 | J1 NetDCU | 3 |
| 3.3 | J2 Display | 5 |
| 3.4 | J3 CFL | 7 |
| 3.5 | J4 Touch | 7 |
| 4 | Configuration NetDCU-ADP/TX2 | 8 |
| 4.1 | Jumpers | 8 |
| 4.2 | Examples | 9 |

1 Overview

The NetDCU-ADP/TX2 connects the Hitachi TX series displays with 40 pin connector listed in Chapter 4.2 to the NetDCU.

2 Arrangement of Connectors

Figure 2.1: Top View



3 Connectors

3.1 Counting of the connector pins

All double row connectors are counted as follows. The row with pin 1 contains all odd-numbered pins (1, 3, 5, etc.), and the opposite row contains all even-numbered pins (2, 4, 6, etc.).

3.2 J1 NetDCU

J1 connects to the NetDCU. See NetDCU documentation for configuration of the display interface.

| J1 | |
|-----|----------|
| Pin | Function |
| 1 | GND |
| 2 | R1 |
| 3 | R0 |
| 4 | G5 |
| 5 | G4 |
| 6 | G3 |
| 7 | G2 |
| 8 | GND |
| 9 | B3 |
| 10 | B2 |
| 11 | B1 |
| 12 | B0 |
| 13 | G1 |
| 14 | G0 |
| 15 | B5 |
| 16 | B4 |
| 17 | GND |
| 18 | NC |
| 19 | DCLK |

| | |
|----|------|
| 20 | NC |
| 21 | DTMG |
| 22 | NC |
| 23 | NC |
| 24 | GND |
| 25 | VLCD |
| 26 | NC |
| 27 | NC |
| 28 | GND |
| 29 | NC |
| 30 | VCFL |
| 31 | R2 |
| 32 | R3 |
| 33 | R4 |
| 34 | R5 |

3.3 J2 Display

J2 connects to the display. See display data sheet and chapter 4 for configuration of jumpers JP1-JP10.

| J2 | |
|-----|-----------------|
| Pin | Function |
| 1 | VLCD |
| 2 | VLCD |
| 3 | VLCD/GND/NC (*) |
| 4 | VLCD/GND/NC (*) |
| 5 | NC |
| 6 | DTMG |
| 7 | GND |
| 8 | DCLK/NC (*) |
| 9 | GND |
| 10 | NC |
| 11 | GND |
| 12 | B5 |
| 13 | B4 |
| 14 | B3 |
| 15 | GND |
| 16 | B2 |
| 17 | B1 |
| 18 | B0 |
| 19 | GND |

| | |
|----|-----------------|
| 20 | G5 |
| 21 | G4 |
| 22 | G3 |
| 23 | GND |
| 24 | G2 |
| 25 | G1 |
| 26 | G0 |
| 27 | GND |
| 28 | R5 |
| 29 | R4 |
| 30 | R3 |
| 31 | GND |
| 32 | R2 |
| 33 | R1 |
| 34 | R0 |
| 35 | VLCD/NC (*)(**) |
| 36 | GND |
| 37 | GND/NC (*)(**) |
| 38 | DCLK/NC (*)(**) |
| 39 | GND/NC (*)(**) |
| 40 | GND/NC (*)(**) |

(*) see Chapter 4 below

(**) see Chapter 3.5 below

3.4 J3 CFL

J3 is directly connected to the VCFL output of the NetDCU.

| J3 | |
|------------|-----------------|
| Pin | Function |
| 1 | VCFL |
| 2 | NC |
| 3 | GND |

3.5 J4 Touch

J4 can be used to connect the touchpanel of the display to the NetDCU. Connect J4 to the touchpanel pins of the NetDCU to use the touchpanel.

| J4 | |
|------------|-----------------|
| Pin | Function |
| 1 | Pin 37 of J2 |
| 2 | Pin 40 of J2 |
| 3 | Pin 39 of J2 |
| 4 | Pin 38 of J2 |
| 5 | Pin 35 of J2 |
| 6 | GND |

4 Configuration NetDCU-ADP/TX2

4.1 Jumpers

| Jumpers | | | |
|---------|--------|----------|---------|
| Jumper | Pin J2 | Set | Not Set |
| 1 | 3 | GND (*) | NC |
| 2 | 3 | VLCD (*) | NC |
| 3 | 4 | VLCD (*) | NC |
| 4 | 4 | GND (*) | NC |
| 5 | 8 | DCLK | NC |
| 6 | 35 | VLCD | NC |
| 7 | 38 | DCLK | NC (**) |
| 8 | 37 | GND | NC (**) |
| 9 | 39 | GND | NC (**) |
| 10 | 40 | GND | NC (**) |

(*) setting JP1 and JP2 or JP3 and JP4 will short VLCD and GND!

(**) do not set JP7-JP10 when using the touch panel.

4.2 Examples

| Examples | | | | | | | | | | |
|----------|-----|-----|-----|-----|---|---|---|---|---|----|
| Display | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| TX14D11 | | x | x | | x | | | | | |
| TX14D12 | | x | x | | x | | | | | |
| TX14D14 | (*) | (*) | (*) | (*) | x | x | | | | |
| TX16D11 | | x | x | | x | | | | | |
| TX18D16 | | x | x | | | | x | x | x | x |
| TX18D57 | | x | x | | | | x | x | x | x |
| TX18D35 | | | | | X | | | | | |
| TX20D16 | | x | x | | | | x | x | x | x |
| TX20D17 | | x | x | | | | x | x | x | x |
| TX23D12 | | x | x | | | | x | x | x | x |
| TX31D55 | | x | x | | | | x | x | x | x |

x Jumper set
 (*) depends on selected scan direction.

Index

| | |
|---------------------|---|
| Configuration | 8 |
| Examples..... | 9 |
| Jumpers | 8 |
| Connector | |
| Arrangement..... | 1 |
| CFL | 7 |
| Counting..... | 2 |
| Display | 5 |
| NetDCU..... | 3 |
| Touch | 7 |
| Connectors | 2 |
| J1 | 3 |
| J2 | 5 |
| J3 | 7 |
| J4 | 7 |
| Overview | 1 |