# **NetDCU-ADP/EDT1**

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F & S Elektronik Systeme GmbH Untere Waldplätze 23 D-70569 Stuttgart Tel.: 0711/6772240 Fax: 0711/6772243

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# 1 LCD- Display Adapter

## 1.1 Overview

Display adapters make the connection between NetDCUx and commonly used LCD – Displays as easy as possible. Usual in trade display connectors could be simply added to complete the connection.

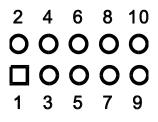
Note that the list of displays named for each adapter is not complete.

# 1.2 Counting of the Connector Pins

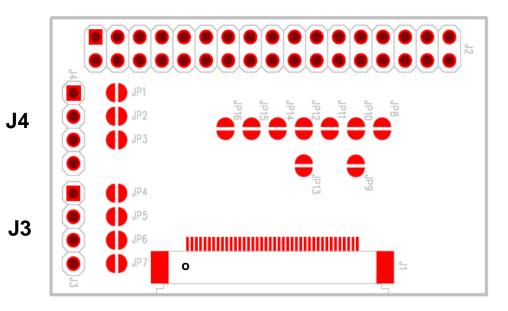
For One-Row-Connectors pin 1 is especially marked in the concerning front view figure and the counting of connectors is continuous.

All connections on the adapters, which prepared for Two-Row Connectors are treated as follow: a square pad marks pin 1 and the row with pin 1 contains all odd-numbered pins (1, 3, 5, 7, etc.), corresponding to this, the row without pin 1 contains all even-numbered pins (2, 4, 6, 8, etc.).

Figure 1.1: Example for counting of connector pins

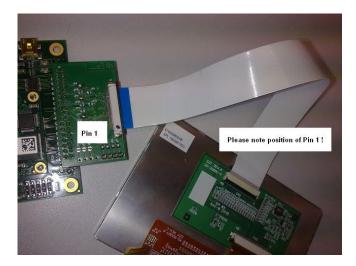


J2

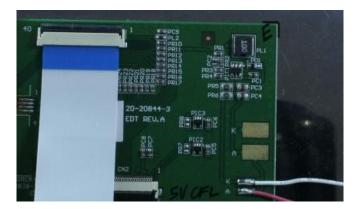


J1

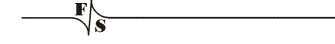
Figure 1.2: Front view of NetDCU- ADP/EDT1



ET035080, 043080, 050080, 057080, 057090



ET070080



# 2 EDT (Emeging) TFT Display Adapter

# 2.1 Adapter NetDCU- ADP/EDT1

shows the assembly of the NetDCU- ADP/EDT1 adapter. The size is 50mm x 30 mm. Table 2.1 shows function and design of the components listed.

#### Table 2.1: Connector description

| Description  | Remarks         |
|--|-----------------|
| Input Connector J2                                     | Spacing 2.54 mm |
| Output Connector J1 *                                  | Pitch 0.50 mm   |
| I2C interface (Capacitive<br>Touch panel) Connector J4 | Spacing 2.54 mm |
| Touch panel Connector J3                               | Spacing 2.54 mm |

\* Bottom contact type

# 2.1.1 Connecting Table

The input connector J2 of adapter NetDCU-ADP/EDT1 can be directly plugged into the LCD interface connector of an NetDCU/ PicoMOD/ PicoCOM starter kit (SKIT). The LCD voltage  $V_{LCD}$  must be set to 3.3V for the EDT displays. The reference for the output connector J1 is shown in Table 2.2. The touch panel signals (4 wire resistive touch) from the display are available on connector J3.

| Table | 2.2: | Connecting | table |
|-------|------|------------|-------|
|-------|------|------------|-------|

| Jumper | Pin at J1 | Function   |
|--------|-----------|--|
| JP1    | 39        | I2C: INT   |
| JP2    | 38        | I2C: SCL   |
| JP3    | 37        | I2C: SDA   |
| JP4    | 37        | Touch: Y+  |
| JP5    | 38        | Touch: X+  |
| JP6    | 39        | Touch: Y-  |
| JP7    | 40        | Touch: X-  |
| JP8    | 3, 4      | VCC for LED<br>via VCFL input on SKIT<br>(extern power supply) |
| JP9    | 33        | Pin 33 set to VLCD<br>(intern power supply, 3.3V)              |
| JP10   | 3, 4      | VCC for LED<br>via VLCD<br>(intern power supply, 3.3V)         |
| JP11   | 30        | HSYNC  |
| JP12   | 32        | ENB (M-Signal)   |
| JP13   | 32        | GND  |
| JP14   | 7         | Reset (display enable signal)                                  |
| JP15   | 31        | VSYNC  |
| JP16   | 33        | GND  |

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| Display  | Jumper             | Notes               |
|----------|--------------------|---------------------|
| ET035080 | JP10, 11, 13, 15   |                     |
| ET043080 | JP10, 11, 13, 15   |                     |
| ET050080 | JP10, 11, 13, 15   | Pin 34 of J1 open ! |
| ET057080 | JP8, 11, 13, 15    |                     |
| ET057090 | JP8, 9, 11, 13, 15 |                     |
| ET070080 | JP8, 9, 11, 13, 15 |                     |
|          |                    |                     |
|          |                    |                     |
|          |                    |                     |
|          |                    |                     |

Attention

If **JP8** is set, the power supply of LED backlight is via VCFL input (3.3V) at the SKIT !

| J3  |          |  |
|-----|----------|--|
| PIN | Function |  |
| 1   | Touch Y+ |  |
| 2   | Touch X+ |  |
| 3   | Touch Y- |  |
| 3   | Touch X- |  |

Table 2.3: Connector J3

# Table 2.4: Connector J4

| J4  |          |  |
|-----|----------|--|
| PIN | Function |  |
| 1   | I2C: INT |  |
| 2   | I2C: SCL |  |
| 3   | I2C: SDA |  |