Pin assignment list “LVDS”

To use with all F&S starter kits

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1 Overview

This documentation describes the connection of different displays with LVDS interface to the F&S starter kits. With this information, it will be easy to design an cable to connect your display with the LVDS adapter (NetDCU-ADP/LVDS) and plug into the F&S starter kit.

1.1 Display Interface

All F&S boards offer an very flexible and powerful interface to control TFT displays. Many different LVDS displays can be connected, only the LVDS adapter and an cable are necessary.
It is possible to adjust the starter kit to a new display by setting a few parameters, for example by downloading a small configuration text file (called display driver). On WindowsCE this is done by setting some keys in the registry. On Embedded Linux, this is done by setting environment variables in the boot monitor program. This is explained in separate documents.
From the view of the software (display driver), there are different possibilities.
Some display types are already predefined, so that a simple choice from a list is all that is required.
Many display drivers are available, user can download from the F&S homepage.
This configurable display drivers can be modified from the user also. This is explained in separate documents.
New display drivers can be requested from F&S, please send your display specification (pdf file) to support@fs-net.de

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1.2 LVDS interface of armStone

LCD connector pinout

1,2,23,24	VLCD (3.3V switched)
3,4,7,10,13,16,19..22	GND
14	LVDS_CLK-
15	LVDS_CLK+
5	LVDS_DATA0-
6	LVDS_DATA0+
8	LVDS_DATA1-
9	LVDS_DATA1+
11	LVDS_DATA2-
12	LVDS_DATA2+
17	n.c.
18	n.c.
24	BL ON signal (3.3V high active)
25	BL PWM signal (3.3V level)

more information available in armStoneA8_Hardware.pdf

1.3 LVDS interface of PicoMOD

LVDS connector J2

J2		
Pin	**Signal**	**Description**
1	VLCD	LCD Voltage 3.3V switched
2	VLCD	LCD Voltage 3.3V switched
3	GND	Ground
4	GND	Ground
5	TX0-	LVDS Transmit 1 negative
6	TX0+	LVDS Transmit 1 positive
7	GND	Ground
8	TX1-	LVDS Transmit 2 negative
9	TX1+	LVDS Transmit 2 positive
10	GND	Ground
11	TX2-	LVDS Transmit 3 negative
12	TX2+	LVDS Transmit 3 positive
13	GND	Ground
14	CLK-	LVDS Clock negative

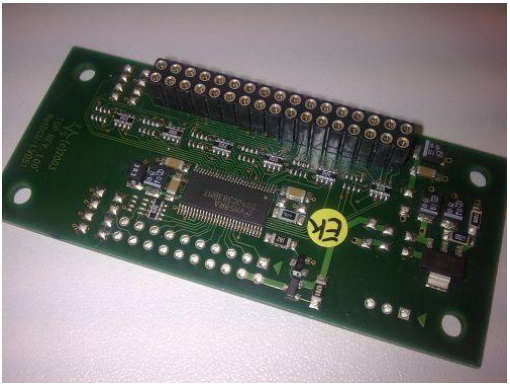
J2		
Pin	**Signal**	**Description**
15	CLK+	LVDS Clock positive
16	GND	Ground
17	TX3-/NC	LVDS Transmit 3 negative (only with 24bit version)
18	TX3+/NC	LVDS Transmit 3 positive (only with 24bit version)
19	GND	Ground
20	GND	Ground
21	GND	Ground
22	GND	Ground
23	VLCD	LCD Voltage 3.3V switched
24	VCFL_ON	Backlight On Signal 3.3V active high
25	BL_PWM	Backlight Dimming PWM Signal 3.3V

more information avail. in PicoMOD7A_LVDS_Hardware.pdf

1.4 LVDS adapter

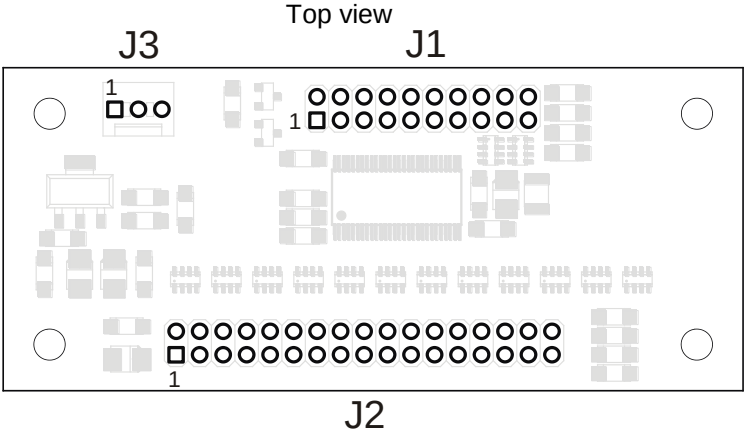
The LVDS adapter NetDCU-ADP/LVDS1 provides an interface to a LCD display with LVDS inputs. Displays with a supply voltage of 3.3V or 5V can be connected. The color depth is preconfigured to 6 Bit (8 bit is LVDS2).

↳See also NetDCU-ADP/LVDS1 hardware documentation



Supported display configurations

The LVDS adapter supports most common configurations for 6 and 8 bit color depth.
The input supports 6 bit digital RGB. The output is preconfigured to 6 or 8 bit and is not user changeable.



J2 SKIT LCD interface (RGB)

J2 Interface		
Pin	**Signal**	**Function**
1	GND	Signal Ground
2	R1	Red Bit 1
3	R0	Red Bit 0 (LSB)
4	G5	Green Bit 5 (MSB)
5	G4	Green Bit 4
6	G3	Green Bit 3
7	G2	Green Bit 2
8	GND	Signal Ground
9	B3	Blue Bit 3
10	B2	Blue Bit 2
11	B1	Blue Bit 1
12	B0	Blue Bit 0 (LSB)
13	G1	Green Bit 1
14	G0	Green Bit 0 (LSB)
15	B5	Blue Bit 5 (MSB)
16	B4	Blue Bit 4
17	GND	Signal Ground
18	---	
19	CLP	Pixel Clock
20	FRP	Frame Impulse, Vsync
21	M	Display Enable Signal

J2 Interface		
Pin	**Signal**	**Function**
22	LIP	Line Impulse, Hsync
23	DEN	Display ON
24	GND	Signal Ground
25	VCC	Power Supply +3.3V (*)
26	---	
27	---	
28	GND	Signal Ground
29	---	
30	---	
31	R2	Red Bit 2
32	R3	Red Bit 3
33	R4	Red Bit 4
34	R5	Red Bit 5 (MSB)

(*) Warning: the LCD power supply on the NetDCU must be switched to 3.3V. A higher voltage can destroy the device

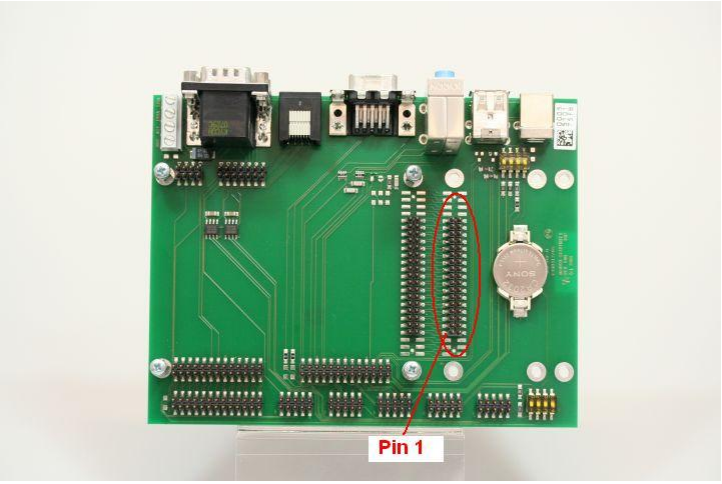
J1 Interface of LVDS adapter (NetDCU-ADP/LVDS1)

J1 LVDS Interface		
Pin	**Signal**	**Function**
1	Tx0-	Negative LVDS Output 0
2	V_{LCD}	Power Supply LCD
3	Tx0+	Positive LVDS output 0
4	V_{LCD}	Voltage supply LCD
5	Tx1-	Negative LVDS output 1
6	GND	Signal Ground
7	Tx1+	Positive LVDS output 1
8	GND	Signal Ground
9	Tx2-	Negative LVDS output 2
10	GND	Signal Ground
11	Tx2+	Positive LVDS output 2
12	GND	Signal Ground
13	TxCLK-	Negative LVDS clock
14	GND	Signal Ground
15	TxCLK+	Positive LVDS clock
16	GND	Signal Ground
17	Tx3-/GND(*)	Negative LVDS output 3 /Ground
18	S1	Configuration output 1
19	Tx3+/GND(*)	Positive LVDS output 3 / Ground
20	S2	Configuration output 2

(*) 8 bit: Tx3, 6bit: GND

1.5 Starter kits of F&S

F&S offer starter kits to all F&S boards.
Generally there is an 34 Pin connector available on the base-board of the starter kit. This 34 Pin connector offer the signals and power supply to drive an display.



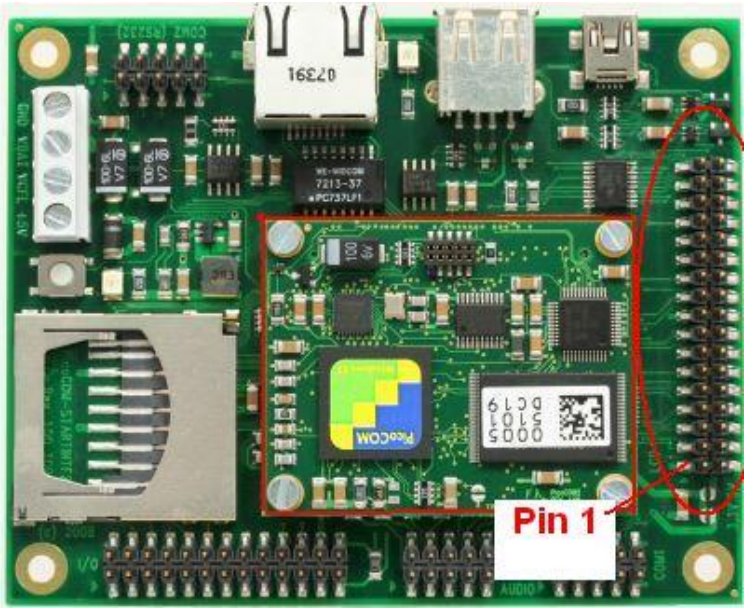
Baseboard (NetDCU-Startinterf4) is part of several NetDCU- and PicoMOD- starter kits.
(Display connector J3A and Pin 1 are marked)

J3 Display Interface

J3A Display Interface		
Pin	Signal	Function
1	GND	Signal Ground
2	R1	Red Bit 1
3	R0	Red Bit 0 (LSB)
4	G5	Green Bit 5 (MSB)
5	G4	Green Bit 4
6	G3	Green Bit 3
7	G2	Green Bit 2
8	GND	Signal Ground
9	B3	Blue Bit 3
10	B2	Blue Bit 2
11	B1	Blue Bit 1
12	B0	Blue Bit 0 (LSB)
13	G1	Green Bit 1
14	G0	Green Bit 0 (LSB)
15	B5	Blue Bit 5 (MSB)
16	B4	Blue Bit 4
17	GND	Signal Ground
18	V_{EEK}	(*)
19	CLP	Data clock pulse (CLCK)
20	FRP	Frame Impulse (Vsync)
21	M	Display data valid signal (Data Enable)

J3A Display Interface		
Pin	Signal	Function
22	LIP	Line Impulse (Hsync)
23	DEN	Display ON (Display Enable)
24	GND	Signal Ground
25	V_{LCD}	Power supply LCD (3.3V or 5V)
26	--	NC
27	--	NC
28	GND	Signal Ground
29	--	NC
30	V_{CFL}	for CFL converter (Switched voltage caming from J1A Pin4)
31	R2	Red Bit 2
32	R3	Red Bit 3
33	R4	Red Bit 4
34	R5	Red Bit 5 (MSB)

(*) ⇨ software adjustable output voltage 0V...+3,3V can be used to dim backlight.



Baseboard (PicoCOM-Startinterf2) coming with PicoCOM2/3/4 starter kit. Display connector and Pin 1 are marked.

J9 LCD Interface

PIN	Signal	Function
1	GND	Signal Ground
2	LCD0	R1
3	LCD4	R0
4	LCD10	G5
5	LCD9	G4
6	LCD8	G3
7	LCD7	G2
8	GND	Signal Ground
9	LCD13	B3
10	LCD12	B2
11	LCD11	B1
12	LCD15	B0
13	LCD6	G1
14	LCD10	G0
15	LCD15	B5
16	LCD14	B4
17	GND	Signal Ground
18	VEEK	Adjust Voltage 0 … +3,3V (*)
19	LCDCLK	DCLK/ SHIFT (CLCK)
20	VSYNC	VSYNC

PIN	Signal	Function
21	LCDDEN	DE (Data Enable)
22	HSYNC	HSYNC
23	-	NC
24	GND	Signal Ground
25	VLCD	LCD Supply Voltage (3,3V or 5V)
26	-	NC
27	-	
28	GND	Signal Ground
29	-	NC
30	VCFL	Background Supply Voltage (Switched voltage caming from J11 Pin2)
31	LCD1	R2
32	LCD2	R3
33	LCD3	R4
34	LCD4	R5

(*) ⇨ software adjustable output voltage 0V...+3,3V can be used to dim backlight.

2 Display Connections

This section describes the pin-by-pin connections to different displays and the LVDS adapter (NetDCU-ADP/LVDS1).

2.1 Sharp

2.1.1 Sharp LQ…

TFT Display: …", 3.3V
Resolution: … x … pixels
Corresponding Adapter: NetDCU-ADP/LVDS1
Jumper

LQ…		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	GND	16	GND
2	GND	16	GND
3	DPS	-	-
4	GND	14	GND
5	GND	14	GND
6	CK+	15	TxCLK+
7	CK-	13	TxCLK-
8	GND	12	GND
9	D2+	11	Tx2+
10	D2-	9	Tx2-
11	GND	10	GND
12	D1+	7	Tx1+
13	D1-	5	Tx1-
14	GND	8	GND
15	D0+	3	Tx0+
16	D0-	1	Tx0-
17	GND	6	GND
18	GND	6	GND
19	VCC	4	V lcd
20	VCC	2	V lcd

2.2 Kyocera

2.2.1 Kyocera TCG104SVLP

TFT Display: 10,4”, 3.3V
Resolution: 800x600 pixels
Corresponding Adapter:

TCG104SVLP		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	GND	6	GND
2	SELLVDS	2	VLCD
3	GND	8	GND
4	GND	8	GND
5	CHN3+	19	Tx3+
6	CHN3-	17	Tx3-
7	GND	10	GND
8	CLK+	15	TxCLK+
9	CLK-	13	TxCLK-
10	GND	10	GND
11	CHN2+	11	Tx2+
12	CHN2-	9	Tx2-
13	GND	12	GND
14	CHN1+	7	Tx1+
15	CHN1-	5	Tx1-
16	GND	12	GND
17	CHN0+	3	Tx0+
18	CHN0-	1	Tx0-
19	GND		GND
20	GND		GND
21	VDD	4	VLCD
22	VDD	4	VLCD
23	GND		GND
24	PWM	-	extern
25	BLEN	-	extern

TCG104SVLP		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
26	GND		GND
27	Backlight +12V	-	extern
28	Backlight +12V	-	extern
29	GND	16	GND
30	GND	16	GND

2.2.2 Kyocera TCG121SVLx

TFT Display: 12.1”, 1 port LVDS, 3.3V , 6 Bit
Resolution: 800 x 600 pixels
Adapter/Cable: SINTF-LVDS-FI-X30HL (B.MKAB.36)

TCG121SVLx		LVDS interface	
Pin	Meaning	Pin	Meaning
1	GND	3	GND
2	Mode	23	VLCD (3.3V) *
3	GND	4	GND
4	GND	7	GND
5	RXIN3+ *		
6	RXIN3- *		
7	GND	10	GND
8	CKIN+	15	LVDS_CLK+
9	CKIN-	14	LVDS_CLK-
10	GND	13	GND
11	RXIN2+	12	LVDS_DATA2+
12	RXIN”-	11	LVDS_DATA2-
13	GND	16	GND
14	RXIN1+	9	LVDS_DATA1+
15	RXIN1-	8	LVDS_DATA1-
16	GND	19	GND
17	RXIN0+	6	LVDS_DATA0+
18	RXIN0-	5	LVDS_DATA0-
19	GND		
20	GND	20	GND
21	VLCD	1	VLCD
22	VLCD	2	VLCD
23	GND	21	GND
24	BLBRT	25	BL_PWM
25	BLEN	24	BL_ON
26	GND		
27	LED Power/ Vin		Extern
28	LED Power/ Vin		Extern

TCG121SVLx		LVDS interface	
Pin	Meaning	Pin	Meaning
29	GND	22	GND
30	GND		

* see data sheet display ** see data sheet “armStone”

2.3 KOE

2.3.1 KOE TX26D12VM

TFT Display: 10.4”, 1 port LVDS, 3.3V , 6/8 Bit
Resolution: 800 x 600 pixels
Adapter/Cable: SINTF-LVDS-JAE (B.MKAB.29)

TX26D12VM		LVDS interface	
Pin	Meaning	Pin	Meaning
1	VDD	1	VLCD
2	VDD	2	VLCD
3	DPS	3	GND*
4	VSS	4	GND
5	IN0-	5	LVDS_DATA0-
6	IN0+	6	LVDS_DATA0+
7	VSS	7	GND
8	IN1-	8	LVDS_DATA1-
9	IN1+	9	LVDS_DATA1*
10	VSS	10	GND
11	IN2-	11	LVDS_DATA2-
12	IN2+	12	LVDS_DATA2+
13	VSS	13	GND
14	CLK IN-	14	LVDS_CLK-
15	CLK IN+	15	LVDS_CLK+
16	VSS	16	GND
17	IN3-		
18	IN3+		
19	AMODE		NC*
20	DIM	25	BL_PWM

* see data sheet display ** see data sheet “armStone”

2.4 Prime-View

2.4.1 Prime-View P…

TFT Display: …", 3.3V
Resolution: … x … pixels
Corresponding Adapter: NetDCU-ADP/LVDS1
Jumper

P…		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	GND	16	GND
2	GND	16	GND
3	DPS	-	-
4	GND	14	GND
5	GND	14	GND
6	CK+	15	TxCLK+
7	CK-	13	TxCLK-
8	GND	12	GND
9	D2+	11	Tx2+
10	D2-	9	Tx2-
11	GND	10	GND
12	D1+	7	Tx1+
13	D1-	5	Tx1-
14	GND	8	GND
15	D0+	3	Tx0+
16	D0-	1	Tx0-
17	GND	6	GND
18	GND	6	GND
19	VCC	4	V lcd
20	VCC	2	V lcd

2.5 NEC

2.5.1 NEC NL10276BC30-10

TFT Display: 15”, 1 port LVDS, 3.3V , 8 Bit
Resolution: 1024 x 768 pixels
Adapter/Cable: SINTF-LVDS-DF13G

NL10276BC30-10		SINTF-LVDS-DF13G	
Pin	Meaning	Pin	Meaning
1	VCC	1	VLCD
2	VCC	2	VLCD
3	GND	3	GND
4	GND	4	GND
5	D0-	5	LVDS_DATA0-
6	D0+	6	LVDS_DATA0+
7	GND	7	GND
8	D1-	8	LVDS_DATA1-
9	D1+	9	LVDS_DATA+
10	GND	10	GND
11	D2-	11	LVDS_DATA2-
12	D2+	12	LVDS_DATA2+
13	GND	13	GND
14	CLK-	14	LVDS_CLK-
15	CLK+	15	LVDS_CLK+
16	GND	16	GND
17	D3-	17	LVDS_DATA3-
18	D3+	18	LVDS_DATA3+
19	GND	19	GND
20	Select input map *	20	**
		21	**
		22	**
		23	**
		24	**
		25	**

* see data sheet display ** see data sheet “armStone”

2.5.2 NEC NL8060BC26-30D

TFT Display: 10,4”, 1 port LVDS, 3.3V
Resolution: 800 x 600 pixels
Corresponding Adapter: NetDCU-ADP/LVDS1
Jumper

NL8060BC26-30D		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	GND	16	GND
2	GND	16	GND
3	DPS	-	-
4	GND	14	GND
5	GND	14	GND
6	CK+	15	TxCLK+
7	CK-	13	TxCLK-
8	GND	12	GND
9	D2+	11	Tx2+
10	D2-	9	Tx2-
11	GND	10	GND
12	D1+	7	Tx1+
13	D1-	5	Tx1-
14	GND	8	GND
15	D0+	3	Tx0+
16	D0-	1	Tx0-
17	GND	6	GND
18	GND	6	GND
19	VCC	4	V lcd
20	VCC	2	V lcd

2.5.3 NEC NL8060BC31-28D

TFT Display 12,1”, 1 port LVDS, 3.3V
Resolution: 800 x 600 pixels
Corresponding Adapter: NetDCU-ADP/LVDS1
Jumper

NL8060BC31-28D		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	GND	16	GND
2	GND	16	GND
3	DPS	-	-
4	GND	14	GND
5	GND	14	GND
6	CK+	15	TxCLK+
7	CK-	13	TxCLK-
8	GND	12	GND
9	D2+	11	Tx2+
10	D2-	9	Tx2-
11	GND	10	GND
12	D1+	7	Tx1+
13	D1-	5	Tx1-
14	GND	8	GND
15	D0+	3	Tx0+
16	D0-	1	Tx0-
17	GND	6	GND
18	GND	6	GND
19	VCC	4	V lcd
20	VCC	2	V lcd

2.6 Toshiba

2.6.1 Toshiba L…

TFT Display: …", 3.3V
Resolution: 640 x 480 pixels
Corresponding adapter: NetDCU-ADP/LVDS1
Jumper

L…		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	GND	16	GND
2	GND	16	GND
3	DPS	-	-
4	GND	14	GND
5	GND	14	GND
6	CK+	15	TxCLK+
7	CK-	13	TxCLK-
8	GND	12	GND
9	D2+	11	Tx2+
10	D2-	9	Tx2-
11	GND	10	GND
12	D1+	7	Tx1+
13	D1-	5	Tx1-
14	GND	8	GND
15	D0+	3	Tx0+
16	D0-	1	Tx0-
17	GND	6	GND
18	GND	6	GND
19	VCC	4	V lcd
20	VCC	2	V lcd

2.7 Optrex

2.7.1 Optrex F-…

TFT Display: …", 3.3V
Resolution: 640 x 480 pixels
Corresponding adapter: NetDCU-ADP/LVDS1
Jumper

F…		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	GND	16	GND
2	GND	16	GND
3	DPS	-	-
4	GND	14	GND
5	GND	14	GND
6	CK+	15	TxCLK+
7	CK-	13	TxCLK-
8	GND	12	GND
9	D2+	11	Tx2+
10	D2-	9	Tx2-
11	GND	10	GND
12	D1+	7	Tx1+
13	D1-	5	Tx1-
14	GND	8	GND
15	D0+	3	Tx0+
16	D0-	1	Tx0-
17	GND	6	GND
18	GND	6	GND
19	VCC	4	V lcd
20	VCC	2	V lcd

2.8 POWERTIP

2.8.1 POWERTIP P…

TFT Display: …", 3.3V
Resolution: 320 x 240 pixels
Corresponding adapter: NetDCU-ADP/LVDS1
Jumper

P…		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	GND	16	GND
2	GND	16	GND
3	DPS	-	-
4	GND	14	GND
5	GND	14	GND
6	CK+	15	TxCLK+
7	CK-	13	TxCLK-
8	GND	12	GND
9	D2+	11	Tx2+
10	D2-	9	Tx2-
11	GND	10	GND
12	D1+	7	Tx1+
13	D1-	5	Tx1-
14	GND	8	GND
15	D0+	3	Tx0+
16	D0-	1	Tx0-
17	GND	6	GND
18	GND	6	GND
19	VCC	4	V lcd
20	VCC	2	V lcd

2.9 EDT

2.9.1 EDT ET070081DM6

TFT Display: 7”, 1 port LVDS, 3.3V , 6 Bit
Resolution: 800 x 480 pixels
Adapter/Cable: SINTF-LVDS- DF19G-30S (B.MKAB.32)

ET070081DM6		SINTF-LVDS-	
Pin	Meaning	Pin	Meaning
1	VCC	1	VLCD
2	VCC	2	VLCD
3	U/D	23	VLCD*
4	L/R	4	GND*
5	IN0-	5	LVDS_DATA0-
6	IN0+	6	LVDS_DATA0+
7	GND	7	GND
8	IN1-	8	LVDS_DATA1-
9	IN1+	9	LVDS_DATA+
10	GND	10	GND
11	IN2-	11	LVDS_DATA2-
12	IN2+	12	LVDS_DATA2+
13	GND	13	GND
14	CLK-	14	LVDS_CLK-
15	CLK+	15	LVDS_CLK+
16	GND	10	GND
17	GND	13	GND
18	GND	16	GND
19	GND	19	GND
20	GND	20	GND
21	GND	21	GND
22	GND	22	GND
23	LED Power**		Extern
24	LED Power**		Extern
25	PWCTRL	24	BL_ON

ET070081DM6		SINTF-LVDS-	
Pin	Meaning	Pin	Meaning
26	LEDCTRL	25	BL_PWM
27	GND	22	GND
28	NC		
29	NC		
30	NC		

* see data sheet display ** see data sheet “armStone”

2.10 Linkface

2.10.1 Linkface T…

TFT Display: …", 3.3V
Resolution: 640 x 480 pixels
Corresponding adapter: NetDCU-ADP/LVDS1
Jumper

T…		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	GND	16	GND
2	GND	16	GND
3	DPS	-	-
4	GND	14	GND
5	GND	14	GND
6	CK+	15	TxCLK+
7	CK-	13	TxCLK-
8	GND	12	GND
9	D2+	11	Tx2+
10	D2-	9	Tx2-
11	GND	10	GND
12	D1+	7	Tx1+
13	D1-	5	Tx1-
14	GND	8	GND
15	D0+	3	Tx0+
16	D0-	1	Tx0-
17	GND	6	GND
18	GND	6	GND
19	VCC	4	V lcd
20	VCC	2	V lcd

2.10.2 Linkface LMT102-6WL

LVDS Display: 10,2”, SVGA, 5V
Resolution: 800 x 600 pixels
Corresponding adapter: NetDCU-ADP/LVDS1 with modifications (J1 LVDS Adapter)

LMT102-6WL		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	Vcc	-	ext.
2	NC	-	
3	ADJ	*	ext.
4	GND	6	GND
5	GND	8	GND
6	RxIN0-	1	TX0-
7	RxIN0+	3	TX0+
8	RxIN1-	5	TX1-
9	RxIN1+	7	TX1+
10	RxIN2-	9	TX2-
11	RxIN2+	11	TX2+
12	CKIN-	13	TXCLK-
13	CKIN+	15	TXCLK+
14	L-R	2	VLCD
15	U-D	6	GND

2.11 AUO Optronix

2.11.1 AUO G104SN02

TFT Display: 10.4”, 1 port LVDS, 3.3V
Resolution: 800 x 600 pixels
Corresponding Adapter: NetDCU-ADP/LVDS1
Jumper

G104SN02		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	VDD	2	V lcd
2	VDD	4	V lcd
3	GND	-	-
4	DPS	-	-
5	RxIN0-	1	Tx0-
6	RxIN0+	3	Tx0+
7	GND	6	GND
8	RxIn1-	5	Tx1-
9	RxIN1+	7	Tx1+
10	GND	10	GND
11	RXIn2-	9	Tx2-
12	RxIN2+	11	Tx2+
13	GND	12	GND
14	RxCLKIN-	13	TxCLK-
15	RxCLKIN+	15	TxCLK+
16	GND	16	GND
17	RxIN3-	-	-
18	RxIN3+	-	-
19	RSV	-	GND
20	SEL68	-	GND

2.11.2 AUO G121SN01

TFT Display: 12.1" , 1 port LVDS, 3.3V
Resolution: 800 x 600 pixels
Corresponding Adapter: NetDCU-ADP/LVDS1

G121SN01		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	VDD	2	V lcd
2	VDD	4	V lcd
3	GND	-	-
4	GND	-	-
5	RxIN0-	1	Tx0-
6	RxIN0+	3	Tx0+
7	GND	6	GND
8	RxIn1-	5	Tx1-
9	RxIN1+	7	Tx1+
10	GND	10	GND
11	RXIn2-	9	Tx2-
12	RxIN2+	11	Tx2+
13	GND	12	GND
14	CKIN-	13	TxCLK-
15	CKIN+	15	TxCLK+
16	GND	16	GND
17	NC/GND	-	-
18	NC/GND	-	-
19	NC/GND	-	GND
20	NC/GND	-	GND

2.11.3 AUO G104SN03

TFT Display: 10.4”, 1 port LVDS, 3.3V
Resolution: 800 x 600 pixels
Corresponding Adapter: NetDCU-ADP/LVDS1

G104SN03		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	VCC	2	V lcd
2	VCC	4	V lcd
3	GND	6	-
4	GND	8	-
5	RxIN0-	1	Tx0-
6	RxIN0+	3	Tx0+
7	GND	-	GND
8	RxIn1-	5	Tx1-
9	RxIN1+	7	Tx1+
10	GND	16	GND
11	RXIn2-	9	Tx2-
12	RxIN2+	11	Tx2+
13	GND	-	GND
14	CKIN-	13	TxCLK-
15	CKIN+	15	TxCLK+
16	GND	-	GND
17	NC	-	-
18	NC	-	-
19	GND	-	GND
20	GND	-	GND

2.11.4 AUO G084SN05-V8

TFT Display: 8.4”, 1 port LVDS, 3.3V
Resolution: 800 x 600 pixels
Corresponding Adapter: NetDCU-ADP/LVDS1

G084SN05-V8		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	VDD	2	V lcd
2	VDD	4	V lcd
3	UD	-	-
4	LR	-	-
5	RxIN1-	1	Tx0-
6	RxIN1+	3	Tx0+
7	GND	6	GND
8	RxIn2-	5	Tx1-
9	RxIN2+	7	Tx1+
10	GND	8	GND
11	RXIn3-	9	Tx2-
12	RxIN3+	11	Tx2+
13	GND	10	GND
14	RxCLKIN-	13	TxCLK-
15	RxCLKIN+	15	TxCLK+
16	GND	12	GND
17	SEL68	-	-
18	NC	-	-
19	RxIN4-	16	GND
20	RxIN4+	16	GND

2.11.5 AUO G084SN05V8

TFT Display: 8.4”, 1 port LVDS, 3.3V
Resolution: 800 x 600 pixels
Corresponding Cable: SINTF-LVDS-DF13G

G084SN05-V8		SINTF-LVDS-DF13G	
Pin	Meaning	Pin	Meaning
1	VCC	1	VLCD
2	VCC	2	VLCD
3	VSCAN	3	GND*
4	HSCAN	4	GND*
5	RXIN1-	5	LVDS_DATA0-
6	RXIN1+	6	LVDS_DATA0+
7	GND	7	GND
8	RXIN2-	8	LVDS_DATA1-
9	RXIN2+	9	LVDS_DATA+
10	GND	10	GND
11	RXIN3-	11	LVDS_DATA2-
12	RXIN3+	12	LVDS_DATA2+
13	GND	13	GND
14	RXCLKIN-	14	LVDS_CLK-
15	RXCLKIN+	15	LVDS_CLK+
16	GND	16	GND
17	Select	19	GND*
18	NC		
19	*		
20	*		

* see data sheet display ** see data sheet “armStone”

2.11.6 AUO G070VW01

TFT Display: 7” , 1 port LVDS, 3.3V
Resolution: 800 x 480 pixels
Corresponding Adapter: NetDCU-ADP/LVDS1

G070VW01		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	VDD	2	V lcd
2	VDD	4	V lcd
3	UD	NC	-
4	LR	NC	-
5	RxIN1-	1	Tx0-
6	RxIN1+	3	Tx0+
7	GND	6	GND
8	RxIn2-	5	Tx1-
9	RxIN2+	7	Tx1+
10	GND	8	GND
11	RXIn3-	9	Tx2-
12	RxIN3+	11	Tx2+
13	GND	10	GND
14	RxCLKIN-	13	TxCLK-
15	RxCLKIN+	15	TxCLK+
16	GND	12	GND
17	SEL68	NC	-
18	NC	NC	-
19	RxIN4-	16	GND
20	RxIN4+	16	GND

2.11.7 AUO G185XW01 V1

TFT Display: 18,5”, 1 port LVDS, 5V , 8 Bit
Resolution: 1366 x 768 pixels
Adapter/Cable: SINTF-LVDS-FI-X30HL (B.MKAB.36)

G185XW01 V1		SINTF-LVDS-	
Pin	Meaning	Pin	Meaning
1	NC		
2	NC		
3	NC		
4	GND	4	GND
5	RXIN0-	5	TX0-
6	RXIN0+	6	TX0+
7	GND	7	GND
8	RXIN1-	8	TX1-
9	RXIN1+	9	TX1+
10	GND	10	GND
11	RXIN2-	11	TX2-
12	RXIN2+	12	TX2+
13	GND	13	GND
14	RXIN1-	14	CLK-
15	RXIN1+	15	CLK+
16	GND	16	GND
17	RXIN3-	17	TX3-
18	RXIN3+	18	TX3+
19	GND	19	GND
20	NC		
21	NC		
22	NC		
23	GND		Extern GND
24	GND		Extern GND
25	GND		Extern GND
26	+5V Power Supply		Extern +5V
27	+5V Power Supply		Extern +5V
28	+5V Power Supply		Extern +5V

G185XW01 V1		SINTF-LVDS-	
Pin	Meaning	Pin	Meaning
29	+5V Power Supply		Extern +5V
30	+5V Power Supply		Extern +5V

* see data sheet display ** see data sheet “armStone”

2.11.8 AUO G065VN01 V2

TFT Display: 6.5”, 1 port LVDS, 3.3V
Resolution: 800 x 600 pixels
Corresponding Adapter: NetDCU-ADP/LVDS1

G065VN01		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	VDD	2	V lcd
2	VDD	4	V lcd
3	GND	6	-
4	SEL68	8	-
5	RxIN0-	1	Tx0-
6	RxIN0+	3	Tx0+
7	GND	10	GND
8	RxIn1-	5	Tx1-
9	RxIN1+	7	Tx1+
10	GND	12	GND
11	RXIn2-	9	Tx2-
12	RxIN2+	11	Tx2+
13	GND	14	GND
14	RxCLKIN-	13	TxCLK-
15	RxCLKIN+	15	TxCLK+
16	NC	nc	-
17	U/D	nc	-
18	R/L	nc	-
19	RxIN3-	nc	
20	RxIN3+	nc	

2.12 InnoLux

2.12.1 InnoLux AT…

TFT Display: …", 3.3V
Resolution: 800 x 480 pixels
Corresponding adapter:

AT…		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	VDD	2	V lcd
2	VDD	4	V lcd
3	UD	NC	-
4	LR	NC	-
5	RxIN1-	1	Tx0-
6	RxIN1+	3	Tx0+
7	GND	6	GND
8	RxIn2-	5	Tx1-
9	RxIN2+	7	Tx1+
10	GND	8	GND
11	RXIn3-	9	Tx2-
12	RxIN3+	11	Tx2+
13	GND	10	GND
14	RxCLKIN-	13	TxCLK-
15	RxCLKIN+	15	TxCLK+
16	GND	12	GND
17	SEL68	NC	-
18	NC	NC	-
19	RxIN4-	16	GND
20	RxIN4+	16	GND

2.13 CHIMEI

2.13.1 CHIMEI G070Y2-L01

TFT Display: 7” , 1 port LVDS, 3.3V
Resolution: 800 x 480 pixels
Corresponding Adapter: NetDCU-ADP/LVDS1

G070Y2-L01		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	RX3+	-	NC *
2	RX3-	-	NC *
3	NC	-	
4	FRC	-	NC *
5	GND	6	GND
6	RXC+	15	TXCLK+
7	RXC-	13	TXCLK-
8	GND	8	GND
9	RX2+	11	TX2+
10	RX2-	9	TX2-
11	GND	12	GND
12	RX1+	7	TX1+
13	RX1-	5	TX1-
14	GND	14	GND
15	RX0+	3	TX0+
16	RX0-	1	TX0-
17	LR	-	NC *
18	UD	-	NC *
19	VCC_IN	2	VLCD (3.3V)
20	VCC_IN	2	VLCD (3.3V)

* See display data sheet

2.13.2 CHIMEI G121I1

TFT Display: 12,1" , 3.3V
Resolution: WXGA 1280x800 pixels
Corresponding Adapter: NetDCU-ADP/LVDS1

G121I1-L01		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	LED Power, 12 V		Extern
2	LED Power, 12 V		Extern
3	LED Power, 12 V		Extern
4	LED Power, 12 V		Extern
5	ENLED	1	VLCD
6	Dimming	2	VLCD
7	GND	3	GND
8	GND	4	GND
9	VCC 3,3 V	23	VLCD
10	VCC 3,3 V	24	VLCD
11	GND	7	GND
12	GND	10	GND
13	RX0-	5	TX0-
14	RX0+	6	TX0+
15	GND	13	GND
16	RX1-	8	TX1-
17	RX1+	9	TX1+
18	GND	16	GND
19	RX2-	11	TX2-
20	RX2+	12	TX2+
21	GND	19	GND
22	RxCLK-	14	TxCLK-
23	RxCLK+	15	TxCLK+
24	GND	20	GND
25	RX3-	17	TX3-
26	RX3+	18	TX3+
27	GND	21	GND

G121I1-L01		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
28	SEL68	NC	-
29	GND	22	GND
30	GND	22	GND

* See display data sheet

2.13.3 CHIMEI G121I1-L01

TFT Display: 12,1" , 1 port LVDS, 3.3V, 6 Bit
Resolution: WXGA 1280x800 pixels
Corresponding Adapter:

G121L1-L01			
Pin	Meaning	Pin	Meaning
1	LED Power 12V		Extern
2	LED Power 12V		Extern
3	LED Power 12V		Extern
4	LED Power 12V		Extern
5	ENLED	24	BL ON**
6	Dimming	25	BL PWM**
7	GND	3	GND
8	GND	4	GND
9	VCC	1	VLCD
10	VCC	2	VLCD
11	GND	7	GND
12	GND	7	GND
13	RX0-	5	LVDS_DATA0-
14	RX0+	6	LVDS_DATA0+
15	GND	7	GND
16	RX1-	8	LVDS_DATA1-
17	RX1+	9	LVDS_DATA+
18	GND	10	GND
19	RX2-	11	LVDS_DATA2-
20	RX2+	12	LVDS_DATA2+
21	GND	13	GND
22	RXCLK-	14	LVDS_CLK-
23	RXCLK+	15	LVDS_CLK+
24	GND	16	GND
25	RX3-	17	LVDS_DATA3-
26	RX3+	18	LVDS_DATA3+
27	GND	19	GND
28	SEL6/8		NC*

G121L1-L01			
Pin	Meaning	Pin	Meaning
29	GND	20	GND
30	GND	21	GND

* see data sheet display ** see data sheet “armStone”

2.14 Eversion

2.14.1 Eversion VGG…

TFT Display: …", 3.3V
Resolution: 800 x 480 pixels
Corresponding adapter: NetDCU-ADP/LVDS1

VGG…		J1 Interface of LVDS adapter	
Pin	Meaning	Pin	Meaning
1	VDD	2	V lcd
2	VDD	4	V lcd
3	UD	NC	-
4	LR	NC	-
5	RxIN1-	1	Tx0-
6	RxIN1+	3	Tx0+
7	GND	6	GND
8	RxIn2-	5	Tx1-
9	RxIN2+	7	Tx1+
10	GND	8	GND
11	RXIn3-	9	Tx2-
12	RxIN3+	11	Tx2+
13	GND	10	GND
14	RxCLKIN-	13	TxCLK-
15	RxCLKIN+	15	TxCLK+
16	GND	12	GND
17	SEL68	NC	-
18	NC	NC	-
19	RxIN4-	16	GND
20	RxIN4+	16	GND

2.15 AMPIRE

2.15.1 AMPIRE AM800480R3TMQW

TFT Display: 3.3V, 7”, 1 port LVDS
Resolution: 800 x 480 pixels
Corresponding adapter: NetDCU-ADP/LVDS1

AM800480R3TMQW		NetDCU8/10/11 PicoMOD3/4/6	
Pin	Meaning	Pin	Meaning
1	VDD	2	R1
2	VDD	4	G5
3	GND	6	G3
4	GND	6	G3
5	IN0-	1	GND
6	IN0+	3	R0
7	GND	8	GND
8	IN1-	5	G4
9	IN1+	7	G2
10	GND	10	B2
11	IN2-	9	B3
12	IN2+	11	B1
13	GND	12	B0
14	CLK-	13	G1
15	CLK+	15	B5
16	GND	14	G0
17	VLED		extern
18	VLED		extern
19	GND	16	B4
20	LEDADJ		extern

2.16 TIANMA

2.16.1 TIANMA TM104SBH04 V1.0

TFT Display: 3.3V, 10,4", 1 port LVDS
Resolution: 800 x 600 pixels, SVGA
Corresponding adapter:

TM104SBH04 V1.0		NetDCU8/10/11 PicoMOD3/4/6	
Pin	Meaning	Pin	Meaning
1	VDD Power Supply	2	VLCD
2	VDD Power Supply	4	VLCD
3	GND	6	GND
4	Reverse Scan	NC	-
5	RxIN0-	1	TX0-
6	RxIN0+	3	TX0+
7	GND	8	GND
8	RxIN1-	5	TX1-
9	RxIN1+	7	TX1+
10	GND	10	GND
11	RxIN2-	9	TX2-
12	RxIN2+	11	TX2+
13	GND	12	GND
14	RxCLKIN-	13	TxCLK-
15	RxCLKIN+	15	TxCLK+
16	GND	14	GND
17	RxIN3-	17	Tx3-
18	RxIN3+	19	TX3+
19	Aging Mode	NC	-
20	SEL68	NC	-

2.17 DLC

2.17.1 DLC DLC1500ACG

TFT Display: 15”, 1 port LVDS, 3.3V , 8 Bit
Resolution: 1024 x 768 pixels
Adapter/Cable: SINTF-LVDS-DF13G

DLC1500ACG		SINTF-LVDS-DF13G	
Pin	Meaning	Pin	Meaning
1	VCC	1	VLCD
2	VCC	2	VLCD
3	GND	3	GND
4	GND	4	GND
5	D0-	5	LVDS_DATA0-
6	D0+	6	LVDS_DATA0+
7	GND	7	GND
8	D1-	8	LVDS_DATA1-
9	D1+	9	LVDS_DATA+
10	GND	10	GND
11	D2-	11	LVDS_DATA2-
12	D2+	12	LVDS_DATA2+
13	GND	13	GND
14	CLK-	14	LVDS_CLK-
15	CLK+	15	LVDS_CLK+
16	GND	16	GND
17	D3-	17	LVDS_DATA3-
18	D3+	18	LVDS_DATA3+
19	GND	19	GND
20	NC*	20	**
		21	**
		22	**
		23	**
		24	**
		25	**

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