Hardware Documentation

aSt-ADP-EDT2

Version 1.00
(2016-04-15)

About This Document

This document describes how to use the aStone EDT2 Display adapter with mechanical and electrical information. The latest version of this document can be found at:

http://www.fs-net.de.

History

Date	V	Platform	A,M,R	Chapter	Description	Au
15.04.16	1.0	All	A	-	Build the document	MW
V	Version					
A,M,R	Added, Modified, Removed					
Au	Author					

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1 Introduction

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

With this Display adapter you can connect an EDT Display to an F&S-Board.

2   Mechanical dimension

26mm

2.3

17.7mm

33mm

15.72

26

13.97

2.3

15.2

33
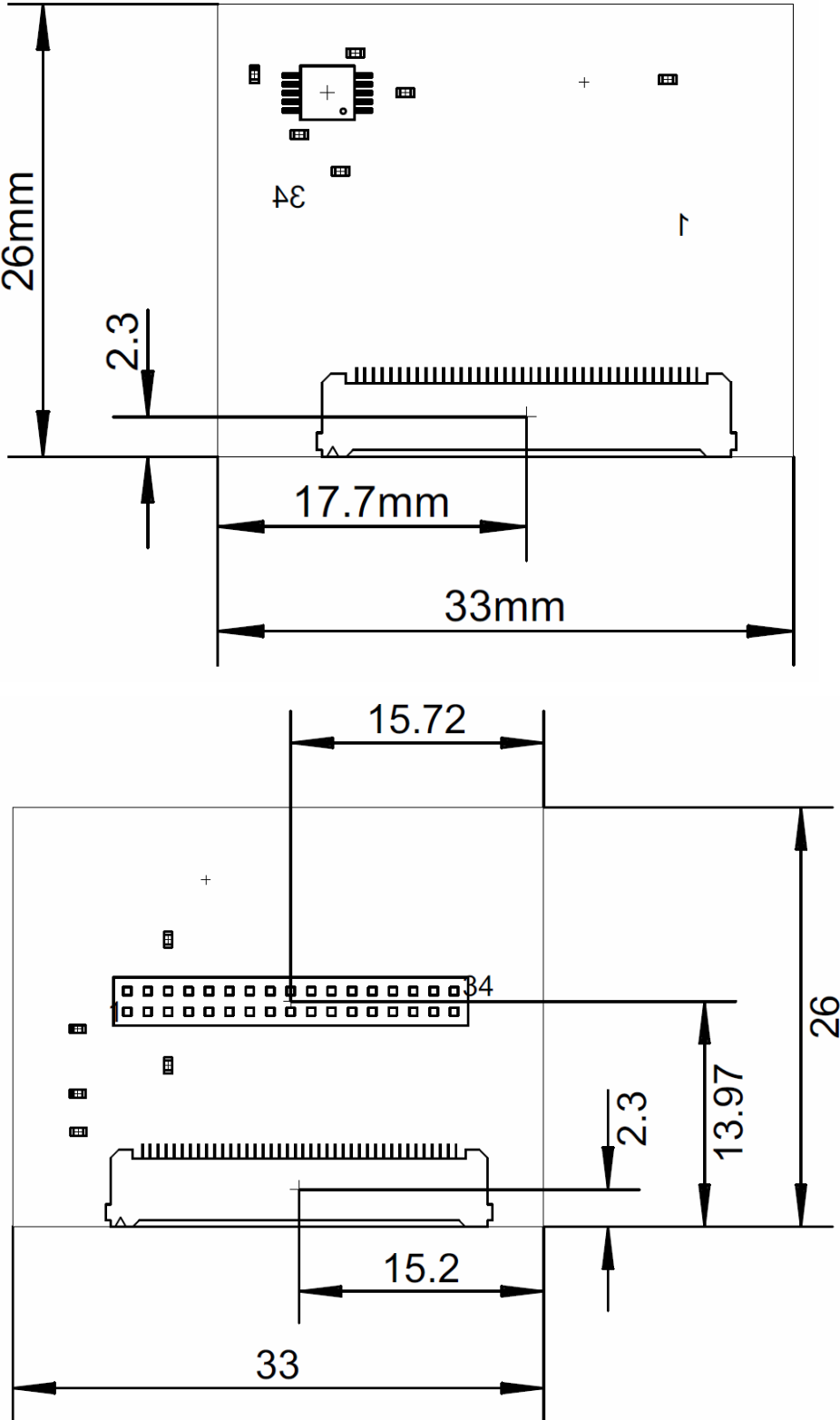
Figure 1: mechanical dimension

2.1 Adapter

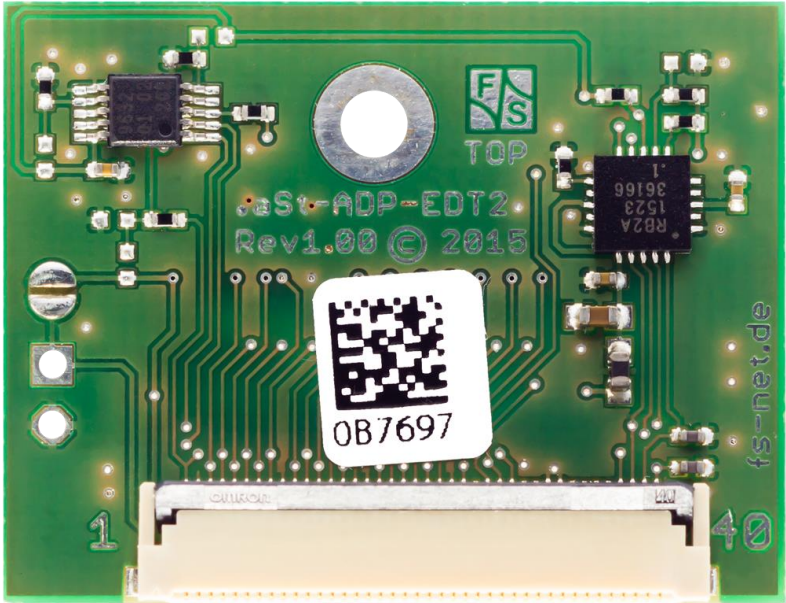|	
PCB size:	26mm x 33mm
PCB thickness:	1.6 ± 0.1mm
High of parts on the top side:	4.7 mm
High of parts on the bottom side:	5.4 mm
Weight:	4 grams

3 Connector layout

Figure 2: Connector Layout Top
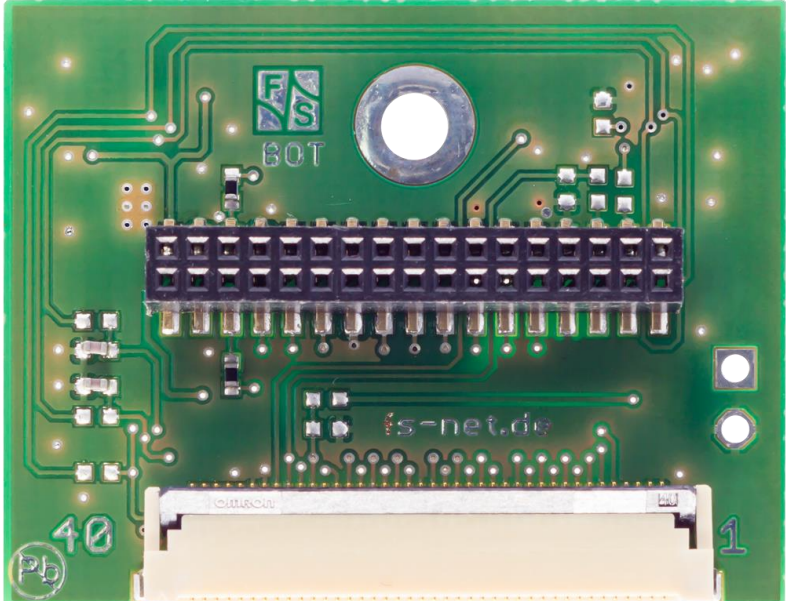
Figure 3: Connector Layout Bottom

4   Connect the Adapter

Figure 4: How the connect the Display

5 Interface and signal description

5.1 J1 aStone-Connector

J1	
Pin	Function
1	3,3 Volt
2	Not connected
3	Ground
4	LCD-CLK
5	LCD-HSYNC
6	LCD-VSYNC
7	Ground
8	LCD-R2
9	LCD-R3
10	LCD-R4
11	LCD-R5
12	LCD-R6
13	LCD-R7
14	Ground
15	LCD-G2
16	LCD-G3
17	LCD-G4
18	LCD-G5
19	LCD-G6
20	LCD-G7
21	Ground
22	LCD-B2
23	LCD-B3
24	LCD-B4

J1	
Pin	Function
25	LCD-B5
26	LCD-B6
27	LCD-B7
28	Ground
29	LCD-DE
30	VLCD
31	VLCD
32	I2C-Data
33	I2C-IRQ
34	I2C-CLK

5.2   J2 external Backlight Connecto

J2	
Pin	Function
1	VBacklight
2	Ground

5.3 J3 Display Connector for "G"-Pinout

J3 (mounted on the Top-Side)	
Pin	Function
1	LCD-DEN
2	Ground
3	LCD-B7
4	LCD-B6
5	LCD-B5
6	LCD-B4
7	LCD-B3
8	LCD-B2
9	Ground
10	LCD-G7
11	LCD-G6
12	LCD-G5
13	LCD-G4
14	LCD-G3
15	LCD-G2
16	Ground
17	LCD-R7
18	LCD-R6
19	LCD-R5
20	LCD-R4
21	LCD-R3
22	LCD-R2
23	Ground
24	LCD-CLK
25	Ground

J3 (mounted on the Top-Side)	
Pin	Function
26	LCD-HSYNC (only if R18* is mounted)
27	LCD-VSYNC (only if R17* is mounted)
28	LCD-DE (only if R19 is mounted)
29	Ground
30	VLCD
31	Ground
32	Ground
33	Display-Rotate
34	VBacklight
35	I2C-Interrupt for capacitive Touch
36	LED-Control
37	Touch-Y+ / I2C-Clock for capacitive Touch*
38	Touch-X+
39	Touch-Y- / I2C-Data for capacitive Touch*
40	Touch-X-

*Mounting Option

5.4 J4 Display Connector for standard Pinout

J4 (mounted on the Bottom-Side)	
Pin	Function
1	Ground
2	Ground
3	VBacklight
4	VBacklight
5	Power-Control
6	LED-Control
7	LCD-DEN
8	LCD-B7
9	LCD-B6
10	LCD-B5
11	LCD-B4
12	LCD-B3
13	LCD-B2
14	Ground
15	LCD-G7
16	LCD-G6
17	LCD-G5
18	LCD-G4
19	LCD-G3
20	LCD-G2
21	Ground
22	LCD-R7
23	LCD-R6
24	LCD-R5
25	LCD-R4
26	LCD-R3

J4 (mounted on the Bottom-Side)	
Pin	Function
27	LCD-R2
28	LCD-CLK
29	Ground
30	LCD-HSYNC (only if R18* is mounted)
31	LCD-VSYNC (only if R17* is mounted)
32	LCD-DE (only if R19 is mounted)
33	Display-Rotate
34	Ground
35	Ground
36	VLCD
37	Touch-Y+
38	Touch-X+
39	Touch-Y-
40	Touch-X-

*Mounted per default

6 Appendix

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