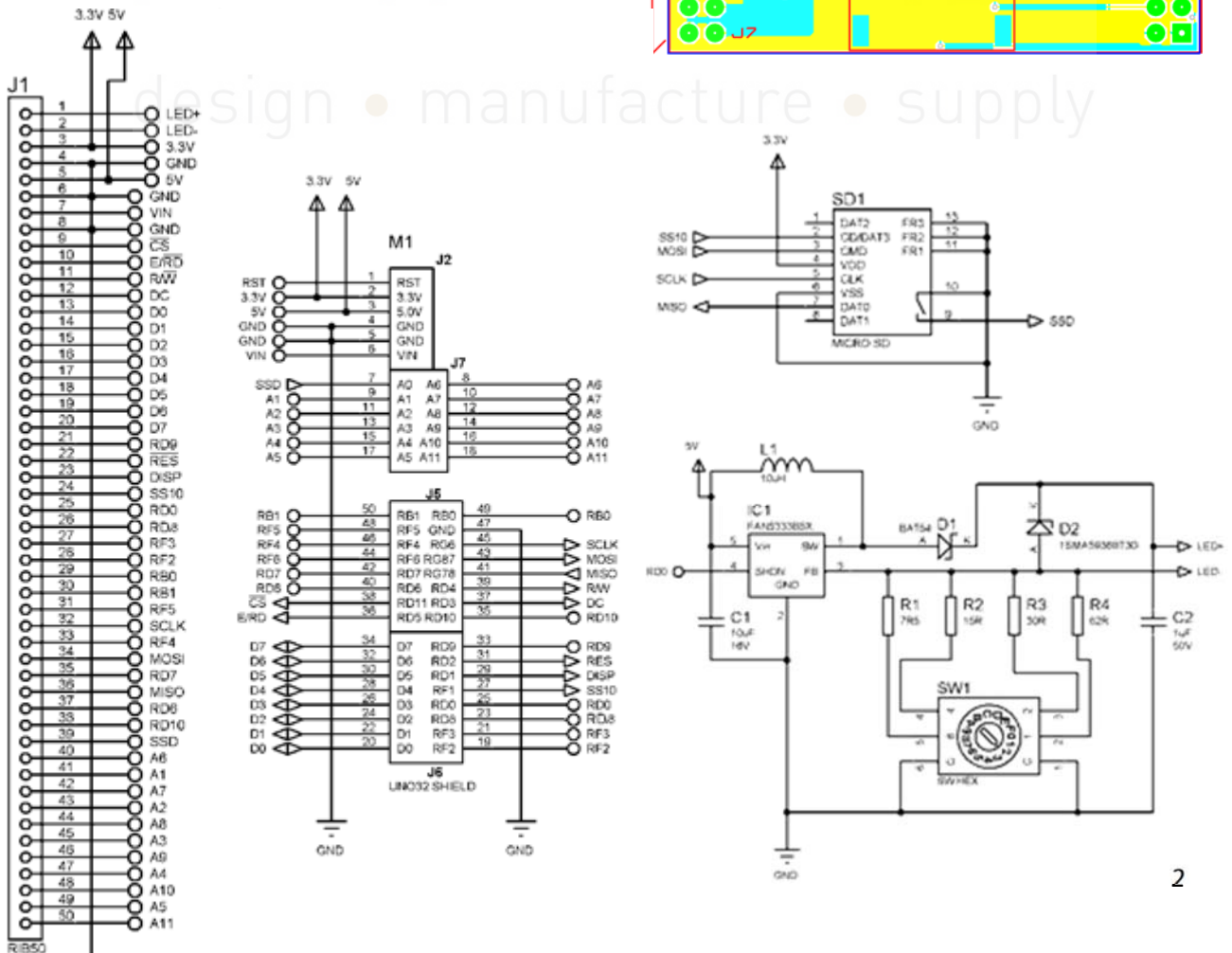
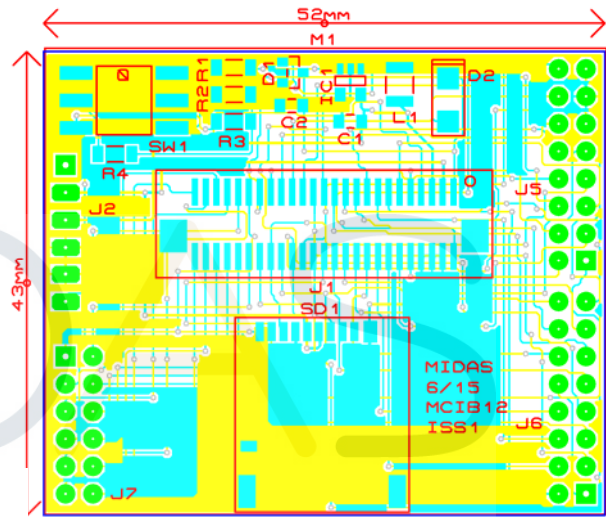
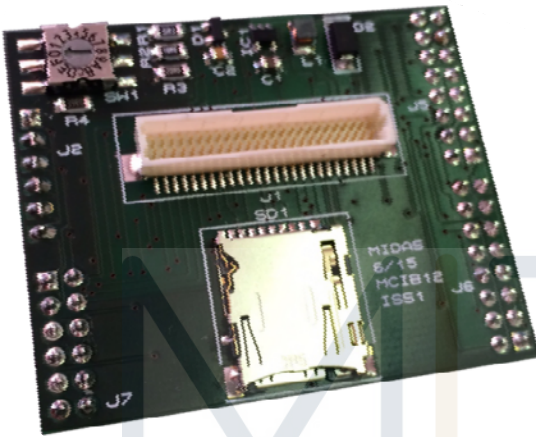


Specification	
Part Number:	MCIB-12
Version:	1
Date:	05/11/2015
Revision	
Date	Description of change
05/11/2015	First Draft
17/11/2015	Changes to Connection Table



MCIB-12

Uno32 Break-out Board with SD Card and LED Backlight Driver. The MCIB-12 Board can be used for any display with a 4 bit, 8 bit, I²C or SPI interface.



Connections

J1 Pin (SDHR-50V-S-B)	Symbol	Description
1	A	LED Backlight +
2	K	LED Backlight -
3	VDD	+3.3V
4	GND	Ground
5	+5V	+5V
6	GND	Ground
7	VIN	Supply to Board
8	GND	Ground
9	\overline{CS}	Chip Select
10	E/\overline{RD}	R/W Enable or Read
11	R/\overline{W}	R/W Selector or Write
12	DC	Data/Command Control
13	D0	Data 0
14	D1	Data 1
15	D2	Data 2
16	D3	Data 3
17	D4	Data 4
18	D5	Data 5
19	D6	Data 6
20	D7	Data 7
21	RD9	PORTD Bidirectional I/O Port
22	\overline{RES}	Power Reset
23	DISP	Display On
24	SS10	SPI10 slave synchronization or frame pulse I/O
25	RD0	PORTD Bidirectional I/O Port
26	RD8	PORTD Bidirectional I/O Port
27	RF3	PORTF Bidirectional I/O Port
28	RF2	PORTF Bidirectional I/O Port
29	RB0	PORTB Bidirectional I/O Port
30	RB1	PORTB Bidirectional I/O Port
31	RF5	PORTF Bidirectional I/O Port
32	SCLK	Serial Clock
33	RF4	PORTF Bidirectional I/O Port
34	MOSI	Master Out Slave In
35	RD7	PORTD Bidirectional I/O Port
36	MISO	Master in Slave Out
37	RD6	PORTD Bidirectional I/O Port
38	RD10	PORTD Bidirectional I/O Port
39	SSD	Synchronous Serial Data
40	A6	PMD10/RF1
41	A1	PMD4/RE4
42	A7	ENVREG
43	A2	PMD3/RE3
44	A8	VSS (Ground)
45	A3	TRD0/RG13
46	A9	IC5/PMD12/RD12
47	A4	PMD0/RE0
48	A10	OC3/RD2
49	A5	PMD8/RG0
50	A11	OC2/RD1

J2 Pin (UNO32)	Symbol	Description/Display
1	RST	Reset
2	3.3V	3.3V
3	5.0V	5.0V
4	GND	Ground
5	GND	Ground
6	VIN	VIN

J7 Pin (UNO32)	Symbol	Description/Display
7	A0	SSD
8	A1	A1
9	A2	A2
10	A3	A3
11	A4	A4
12	A5	A5
13	A6	A6
14	A7	A7
15	A8	A8
16	A9	A9
17	A10	A10
18	A11	A11

J6 Pin (UNO32)	Symbol	Description/Display
19	RF2	PORTF Bidirectional I/O Port
20	D0	Data 0
21	RF3	PORTF Bidirectional I/O Port
22	D1	Data 1
23	RF8	PORTD Bidirectional I/O Port
24	D2	Data 2
25	RD0	PORTD Bidirectional I/O Port
26	D3	Data 3
27	RF1	SS10
28	D4	Data 4
29	RD1	DISPL
30	D5	Data 5
31	RD2	RES
32	D6	Data 6
33	RD9	PORTD Bidirectional I/O Port
34	D7	Data 7

J5 Pin (UNO32)	Symbol	Description/Display
35	RD10	RD10
36	RDS	E/RD
37	RD3	DC
38	RD11	CS
39	RD4	R/W
40	RD6	PORTD Bidirectional I/O Port
41	RG78	MISO
42	RD7	PORTD Bidirectional I/O Port
43	RG87	MOSI
44	RF6	PORTF Bidirectional I/O Port
45	RG6	SCLK
46	RF4	PORTF Bidirectional I/O Port
47	GND	Ground
48	RF5	PORTF Bidirectional I/O Port
49	RB0	PORTB Bidirectional I/O Port
50	RB1	PORTB Bidirectional I/O Port

LED Backlight Current

The LED Backlight is driven by a constant current circuit which can be set for various currents using SW1. Below is a Table showing the LED Backlight currents available:

LED Backlight Current selection	
SW1 Position	Current mA
1	5
2	11
3	16
4	21
5	26
6	32
7	37
8	42
9	47
A	53
B	58
C	63
D	68
E	74
F	79

Example



Figure 1. Example of the MCIB-12 Board used in conjunction with both the UNO32 and MPBV5 boards to power one of our range of TFT Displays. It also uses the SDHR-50V-S-B connector and MCCBL-SHDR-SHDR-100 cables which can all be seen in the picture above.

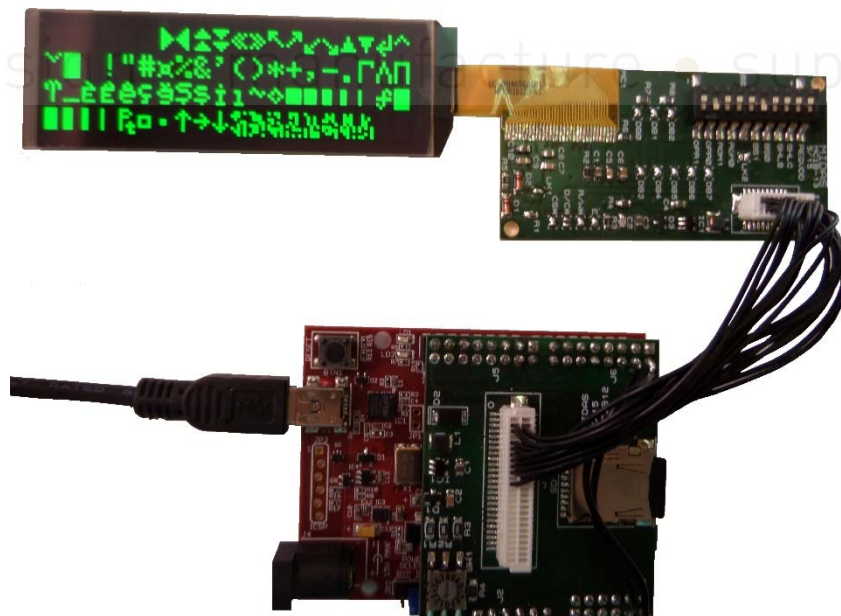


Figure 2. Example of the MCIB-12 Board used in conjunction with the MCIB-13 Board to power one of our range of OLED Displays. It also uses the SDHR-50V-S-B connector and MCCBL-SHDR-SHDR-100 cables which can all be seen in the picture above.

Additional Products

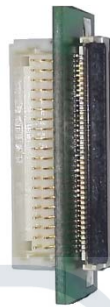
Below are products which can be used in conjunction with the MCIB-12 to aid in the connection to various displays:

MPBV5



50-way FFC to cable and wires.

MPBV6

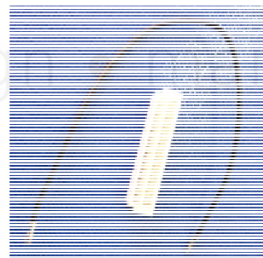


40-way FFC to cable and wires.

MPBV7



30-way FFC to cable and wires.



Compatible Receptacle:

SHDR-50V-S-B

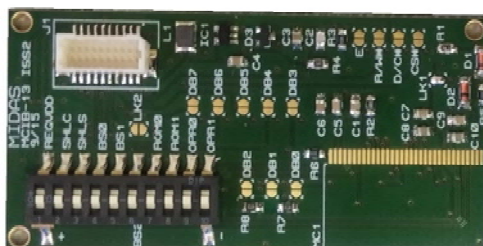
SHDR-40V-S-B

SHDR-30V-S-B.

Pre-crimped wire 100mm long.

MCCBL-SHDR-SHDR-100

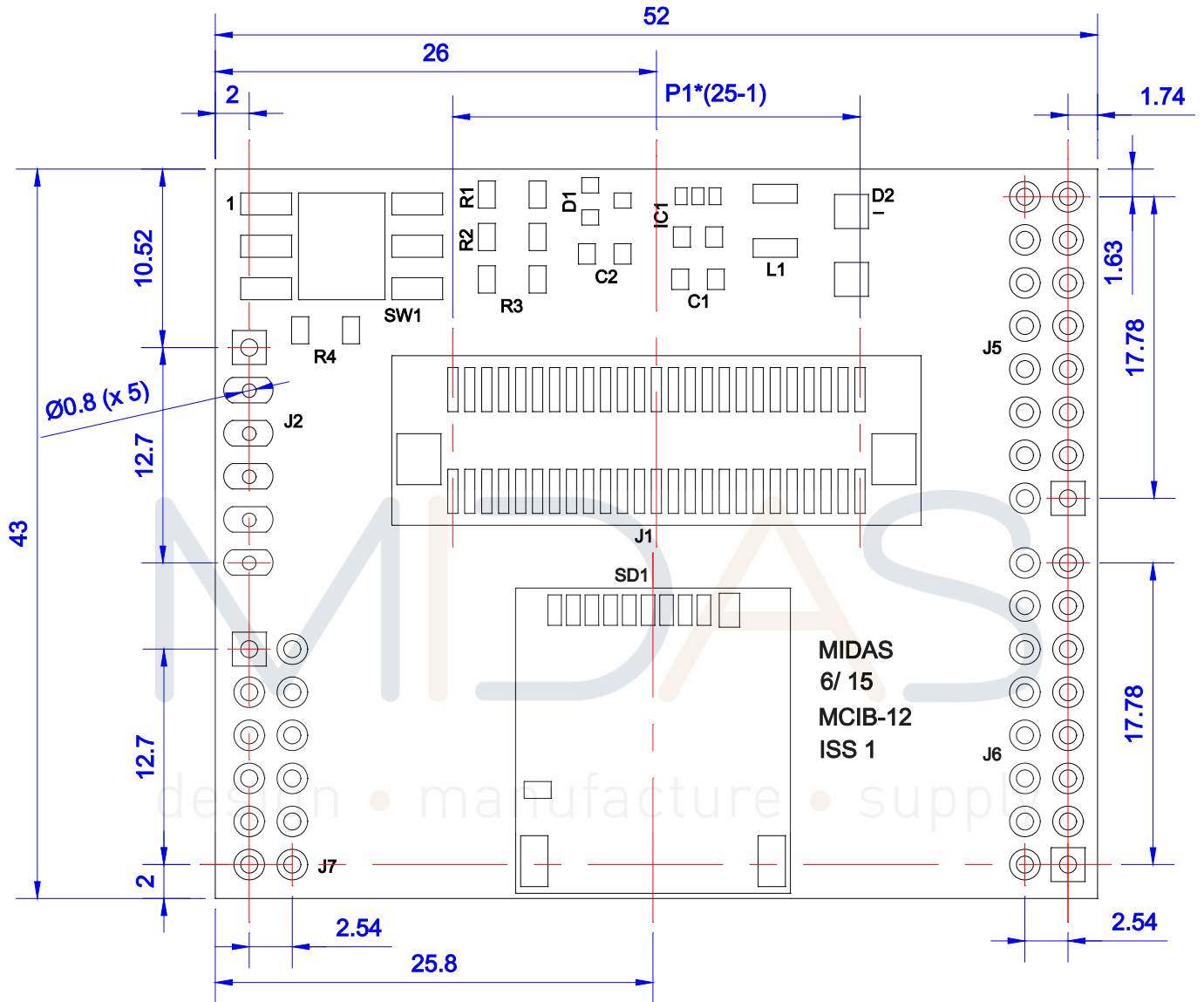
MCIB-13



Direct Solder on OLED Character Interface Board.

Can be used with MCIB-12 and UNO32 boards for easy evaluation of COG OLED character displays.

Mechanical Drawing



***Note all measurements are in mm
and all wholes are 0.5mm in radius
unless stated otherwise.**