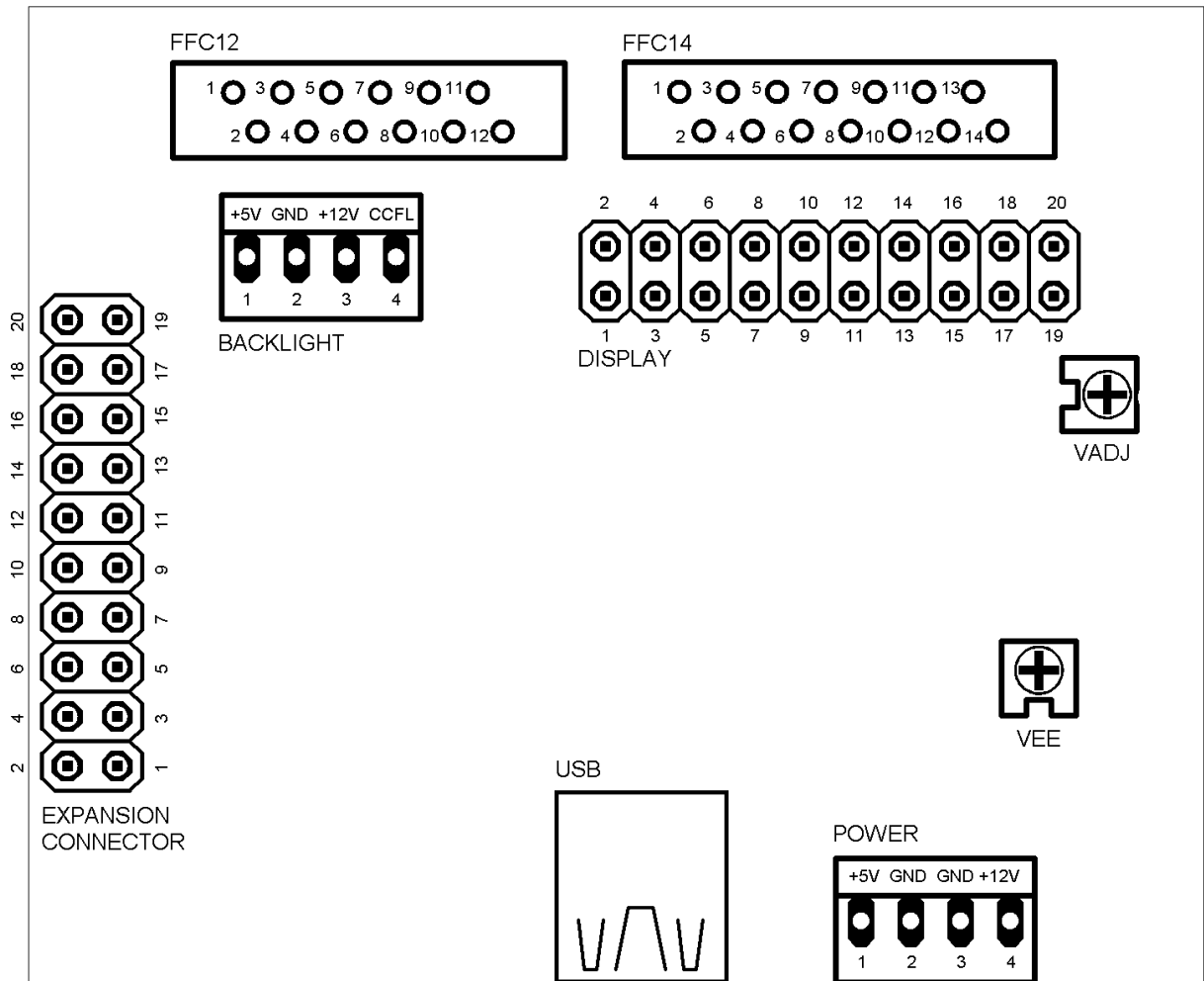


Connectors



Generic display connector

No	Symbol	Function
1	FPFRAME	First line marker
2	FPLINE	Data latch
3	GND	Ground (0V)
4	FPSHIFT	Data shift
5	FPD0	Display data
6	FPD1	Display data
7	FPD2	Display data
8	FPD3	Display data
9	GND	Ground (0V)
10	GND	Ground (0V)
11	+5V	Power supply (+5V)
12	+5V	Power supply (+5V)
13	MOD	Alternate (M / MOD / WF) (Note 1)
14	/DISPOFF	Display On / Off (Note 1)
15	VEE	Power supply for LCD drive
16	VADJ	LCD contrast adjust voltage
17	+3.3V	Power supply (+3.3V) (Note 1)
18	NC	Not connected
19	+12V	Power supply (+12V)
20	+12V	Power supply (+12V)

Note 1:

These pins are NC in board revisions <1.1

XECL and YSCL signals of the S1D13700 are not brought to any header but they are available in soldering points on the circuit board.

14 pin 1.25 mm FFC connector

No	Symbol	Function
1	D0	Display data
2	D1	Display data
3	D2	Display data
4	D3	Display data
5	/DISPOFF	Display control H:Display on L:Display off
6	FLM	First line marker
7	NC	Not connected
8	LP	Data latch
9	CP	Data shift
10	VCC	Power supply for logic (+5V)
11	VSS	Ground (0V)
12	VEE	Power supply for LCD drive
13	VADJ	LCD contrast adjust voltage
14	FG	Frame ground

Displays compatible with this connector include

- Optrex DMF-50840
- Hitachi SP14Q002
- Datavision DG-32240-17
- and many others

12 pin 1.25 mm FFC connector

No	Symbol	Function
1	VADJ (Vo)	LCD contrast adjust voltage
2	VEE	Power supply for LCD drive
3	D3	Display data
4	D2	Display data
5	D1	Display data
6	D0	Display data
7	NC	Not connected
8	VSS	Ground (0V)
9	VCC	Power supply for logic (+5V)
10	CP (CP2)	Data shift (Data input clock signal)
11	LP (CP1)	Data latch (Input data latch signal)
12	FLM (S)	First line marker (Scan startup signal)

Power input connector

No	Symbol	Function
1	+5V	
2	GND	
3	GND	
4	+12V	Optional

+12V input is optional and it is only used in the generic display output connector and in the backlight connector. If your display configuration isn't using +12V voltage for anything then it's enough to connect only +5V.

Backlight connector

No	Symbol	Function
1	+5V	+5V power supply
2	GND	Ground. Backlight PWM control switches this pin
3	+12V	+12V power supply
4	CCFL	CCFL dimming PWM output signal. Configurable for 3.3V, 5V, 12V

Connect the backlight to either +5V or +12V supply pin. For LED backlight use a current limiting resistor if necessary. Backlight switching is done on the ground side.

CCFL dimming output is a separate PWM output that can be used to generate a dimming signal that some CCFL inverters use. Output level for this PWM signal can be configured to be either +3.3V, +5V or +12V. Please ask for more information if you plan using this.

Expansion connector

No	Symbol	Function
1	GND	Ground (0V)
2	GND	Ground (0V)
3		GPIO
4		GPIO
5	RX	GPIO
6	TX	GPIO
7	SSEL	GPIO
8	GND	Ground (0V)
9	MISO	GPIO
10	MOSI	GPIO
11	SCK	GPIO
12		GPIO
13	SCL	GPIO
14	SDA	GPIO
15	+3.3V	Power supply (+3.3V)
16		GPIO
17		GPIO
18		GPIO
19	GND	Ground (0V)
20	+3.3V	Power supply (+3.3V)