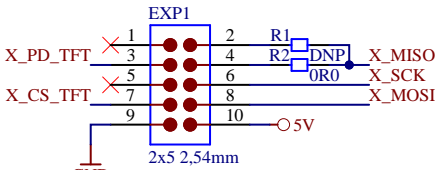


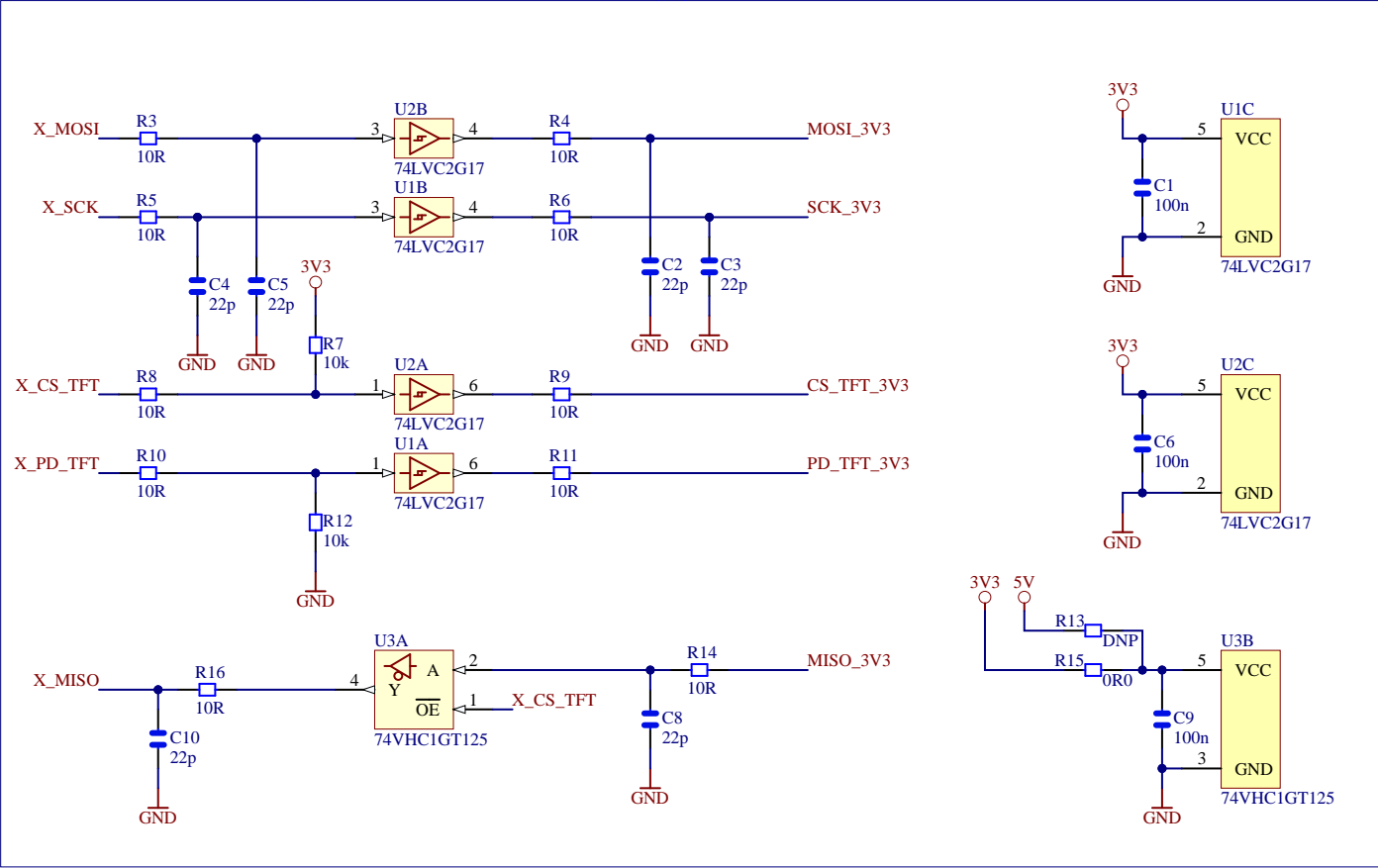
Connector to Printer



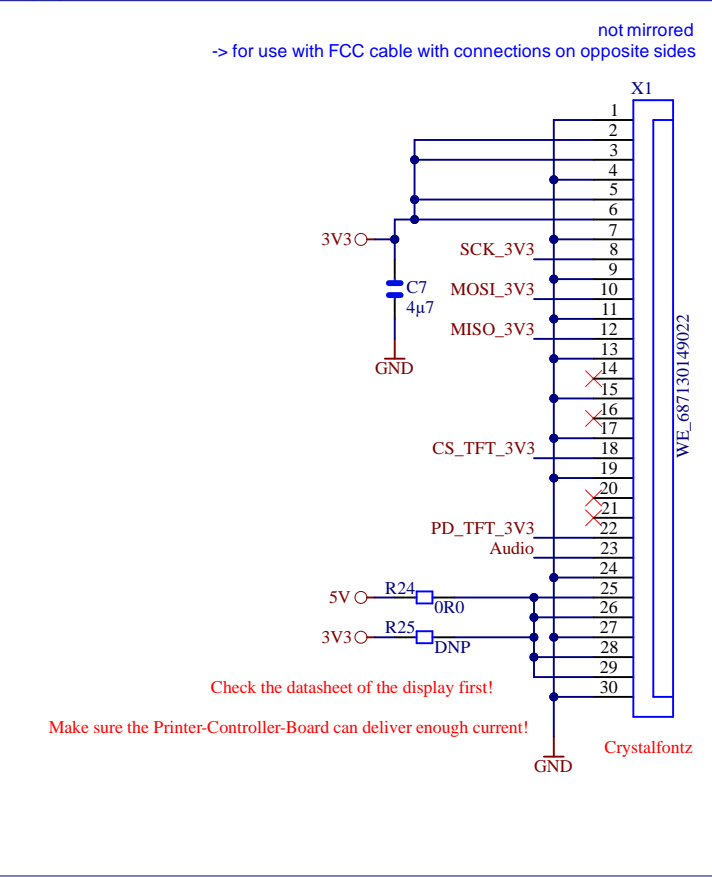
For the stock CR-10/Ender-3 board, remove R2 and populate R1

Note: many boards have the pins in the wrong order with a false numeration. For example the CR-10/Ender-3/SKR mini E3 boards show VCC on pin 1 and GND on pin 2 while the connector is populated rotated by 180° and therefore actually having VCC on pin 10 and GND on pin 9. Others like the Fysetc Cheetah use the correct numeration and while on a quick glance it appears that they use a different pinout for the EXP1 header than the stock Ender-3 board it really is the same. And others like the MKS Robin E3 have the connector rotated while keeping the correct numeration.

Level-Shifter 5V or 3,3V I/O from printer-controller to 3,3V I/O for the display



Display-Connector

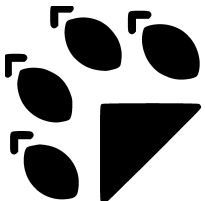
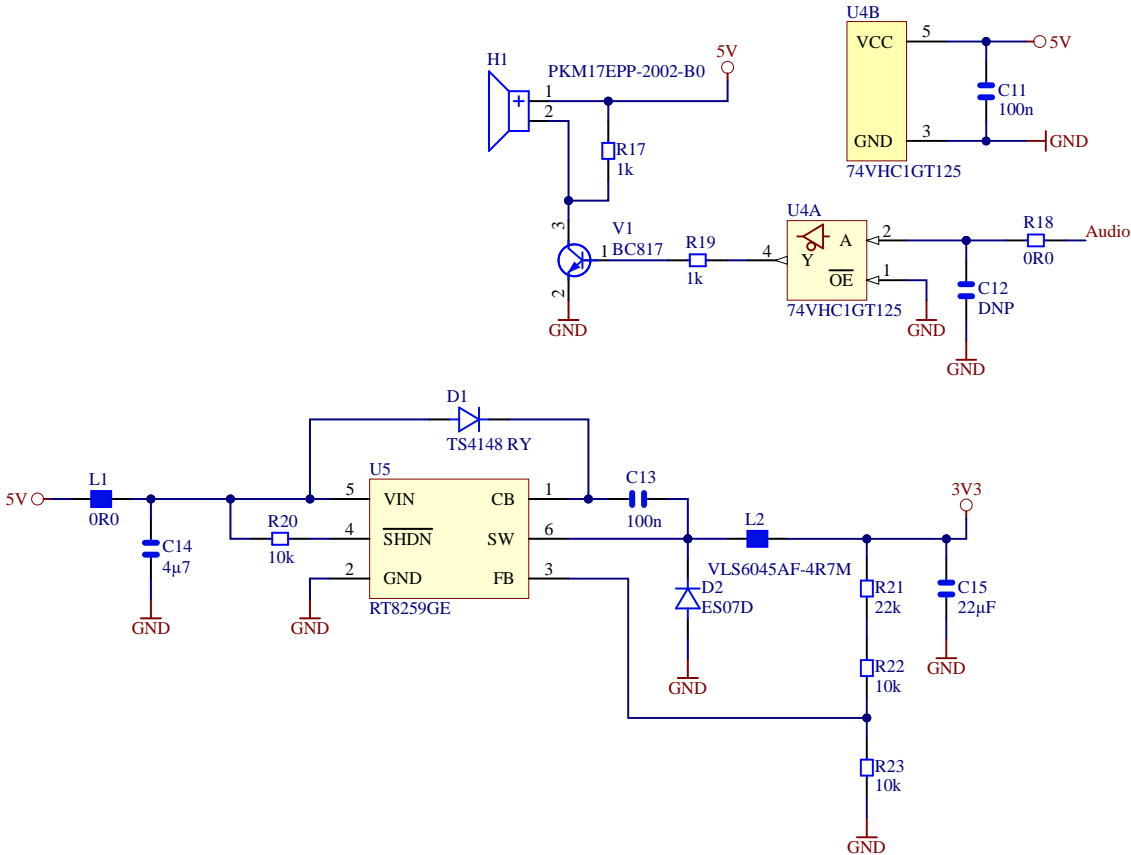


Rumba32	ARMED	Fysetc Cheetah	Reprap GLCD	EXP1	Reprap GLCD	Fysetc Cheetah	ARMED	Rumba32
PE8	PC9	PC9	Beeper	1 2	BTN_ENC	PC12	PC3	PE7
PE9	PE8	PC11	LCDE	3 4	LCD_RS	PB14 (SPI2_MISO)	PE9	PE10
PE12 (SPI4_SCK)	PB12 (SPI2_SS)	PC10	LCD4	5 6	LCD5	PB13 (SPI2_SCK)	PB13 (SPI2_SCK)	PE13 (SPI4_MISO)
PE14 (SPI4_MOSI)	PB14 (SPI2_MISO)	PB12 (SPI2_SS)	LCD6	7 8	LCD7	PB15 (SPI2_MOSI)	PB15 (SPI2_MOSI)	PE15
GND (SPI4_MOSI)	GND	GND	GND	9 10	5V	5V	5V	5V

REMRAM	Bigtreetech SKR V1.3 V1.4	Bigtreetech SKR E3 DIP	Bigtreetech SKR mini E3	Crealty CR-10/Ender-3	Reprap GLCD	EXP1	Reprap GLCD	Crealty CR-10/Ender-3	Bigtreetech SKR mini E3 V1	Bigtreetech SKR V1.3 V1.4	REMRAM
PC6	P1.30	PA15	PB5 (SPI3.MOSI)	PA4	PD3 (USART1_MOSI)	1 2	BTN_ENC	PC0	PB6	P0.28	PC7
PD14	P1.18	TX1	PA9	PD2 (USART1_MISO)	LCD4	3 4	LCD_RS	RESET	P1.19	P1.19	PD15
PD13	P1.20 (SCK0)	PA9	PA10	PD2 (USART1_MISO)	LCD5	5 6	LCD5	RESET	P1.21 (SSEL0)	P1.21 (SSEL0)	PD12
PD11	P1.22	PB8	PB8	PA3	LCD6	7 8	LCD7	RESET	P1.23 (MISO0)	P1.23 (MISO0)	PD10
GND	GND	GND	GND	GND	GND	9 10	5V	5V	5V	5V	5V

MKS Robin E3 Robin Lite3	Ultimachine Archim2.2b	Fysetc S6	EXP1	Fysetc S6	Ultimachine Archim2.2b	MKS Robin E3 Robin Lite3
PC1	PA14	PC9	10 9	PA8	PA13 (USART1_MOSI)	PC3
PA4 (SPI1_SS)	PA15	PC11 (SPI3.MISO)	8 7	PD2	PA12 (USART1_MISO)	PA5 (SPI1_SCK)
PA6 (SPI1_MISO)	PA0	PC10 (SPI3_SCK)	6 5	PC12 (SPI3_MOSI)	PA16 (USART1_SCK)	PA7 (SPI1_MOSI)
PC4	PA1	PD0	4 3	PD1	PC2	PC5
GND	GND	GND	2 1	5V	5V	5V

MKS SBASE V1.3	Bigtreetech SKR PRO	Einsy Rambo	Fysetc F6	EXP1	Fysetc F6	Einsy Rambo	Bigtreetech SKR PRO	MKS SBASE V1.3
P1.31 (SCK)	PG4	PH2 (UART2_SCK)	PC0	10 9	PC2	PH6	PA8	P1.30
P0.18 (MOSI)	PD11	PF7	PH0 (UART2_MISO)	8 7	PH1 (UART2_MOSI)	PD5 (UART1_SCK)	PD10	P0.16 (SSEL)
P0.15 (SCK)	PG2	PF5	PA1	6 5	PA3	PG4	PG3	NC
NC	PG6	PH7	PA5	4 3	PA7	PG3	PG7	NC
GND	GND	GND	GND	2 1	5V	5V	5V	5V



05019-05-02

MTG1

X1

EXP1

L2

L1

D2

C13

U5

D1

R23

R21

R22

C15

R17

H1

C11

R19

U1

R18

C12

U4

MTG2

