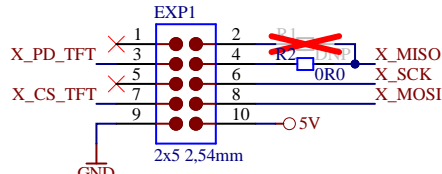


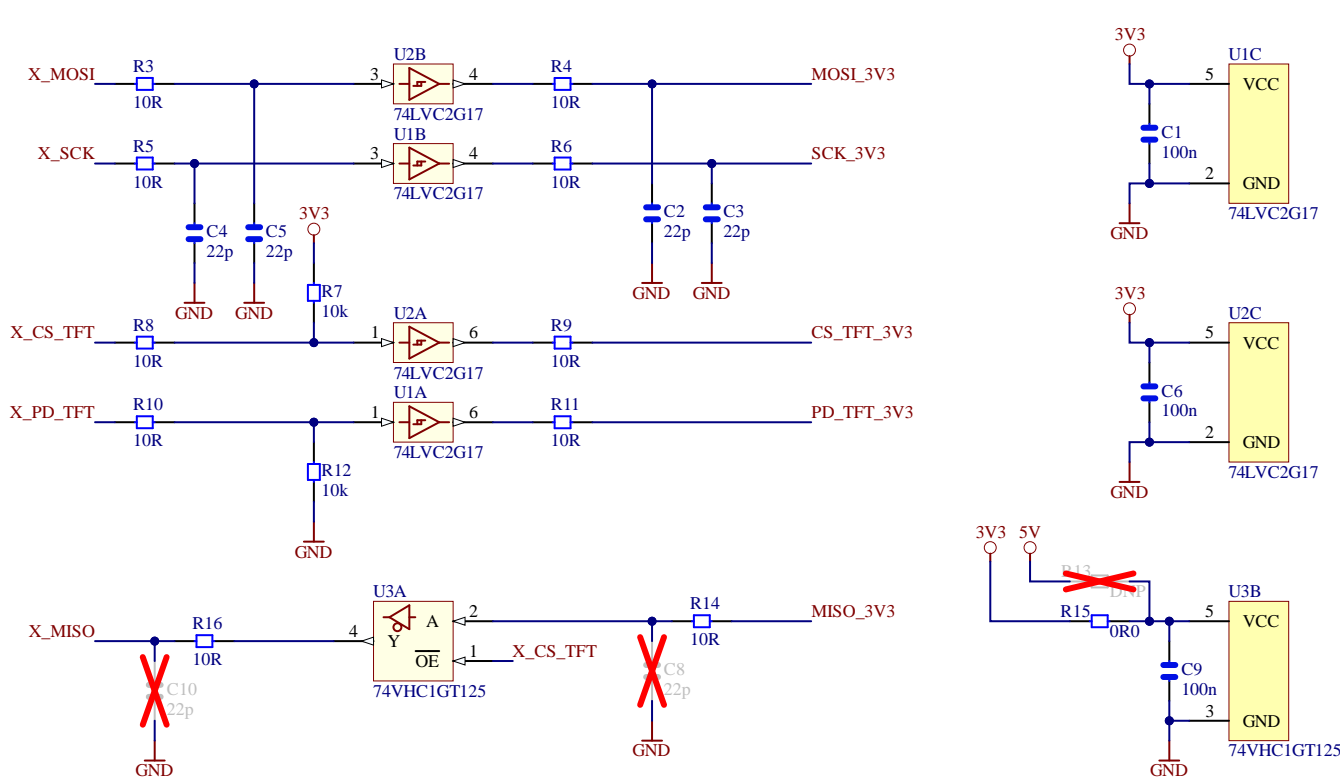
Connector to Printer



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

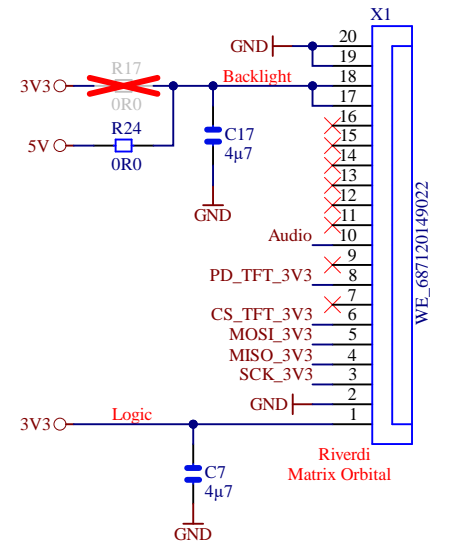
Note: many boards have the pins in the wrong order with a false numeration.
For example the CR-10/Ender-3/SKR mini E3 boards show VCC on pin 1 and GND on pin 2 while the connector is populated rotated by 180° and therefore actually having VCC on pin 10 and GND on pin 9. Others like the Fysetc Cheetah 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

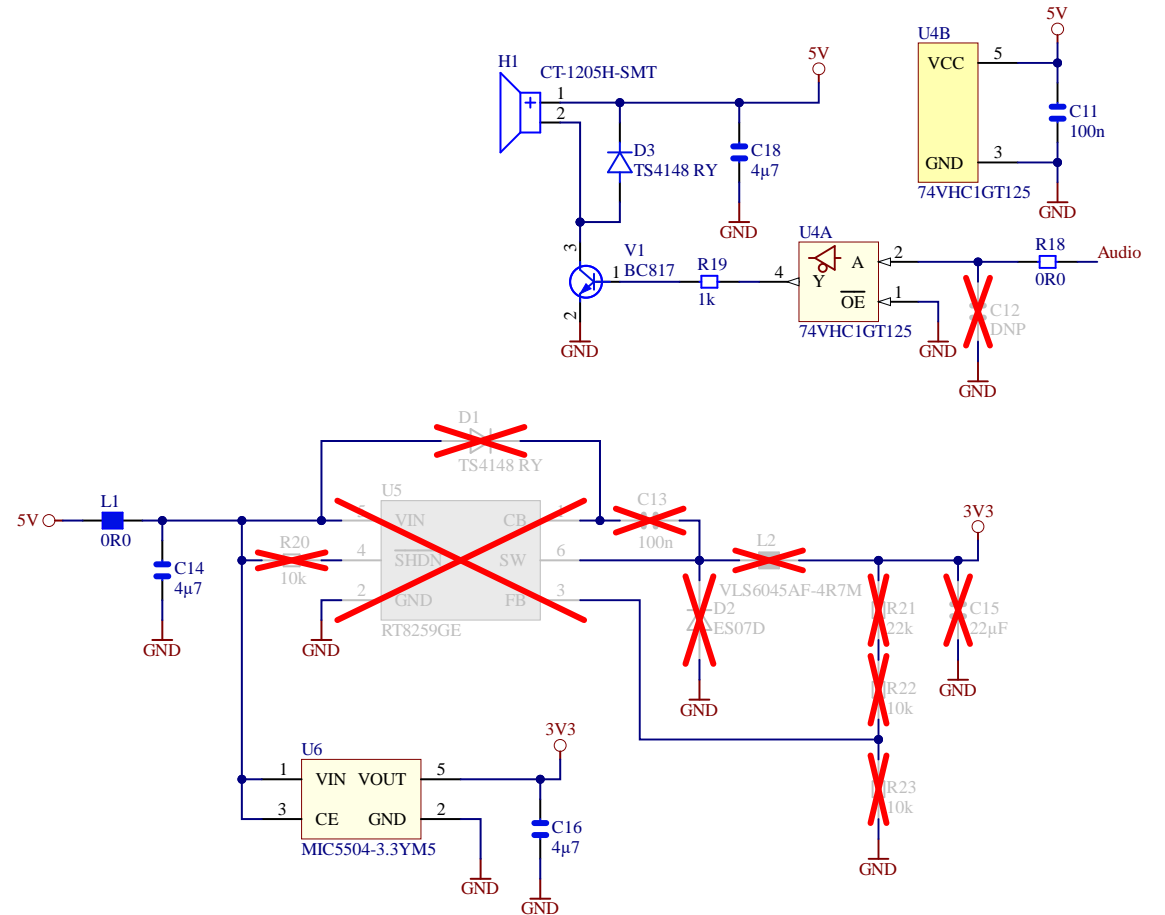
-> for use with FCC cable with connections on opposite sides not mirrored



Note:
Matrix Orbital EVE2 displays can not be used with a 5V backlight supply.
Matrix Orbital EVE3 displays use 3.3V by default for the backlight supply.
Matrix Orbital EVE3 displays can be converted to use 5V for the backlight supply.
Riverdi displays can use 3.3V or 5V for the backlight supply directly.

If the backlight is supplied with 5V, U6 can be used instead of U5.
If the backlight is supplied with 3.3V, using U5 instead of U6 is required at 4.3" or above.

Rumba32	ARMED	Cheetah	GLCD		GLCD	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	GND	GND	GND	9 10	5V	5V	5V	5V		
ch	Bigtreetech SKR E3 DIP	Bigtreetech SKR mini E3	Creality CR-10/Ender-3	Reprap GLCD	EXP1	Reprap GLCD	Creality CR-10/Ender-3	Bigtreetech SKR mini E3 V1	Bigtreetech SKR V1.3 V1.4	REMRAM
4	PA15	PB5 (SPI3.MOSI)	PA4	Beeper	1 2	BTN_ENC	PC0	PB6	P0.28	PC7
CK0)	TX1	PA9	PD3 (USART1_MOSI)	LCDE	3 4	LCD_RS	RESET	RESET	P1.19	PD15
	PA9	PA10	PD2 (USART1_MISO)	LCD4	5 6	LCD5	PA1	PB9	P1.21 (SSEL0)	PD12
	PB8	PB8	PA3	LCD6	7 8	LCD7	PC1	PB7	P1.23 (MISO0)	PD10
	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	PD5 (UART1_SCK)	PA8	P1.30	
P0.18 (MOSI)	PD11	PF7	PH0 (UART2_MISO)	8 7	PH1 (UART2_MOSI)			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	



Project: EVE Display-Adapter
Version, Revision: Matrix Orbital / Riverdi , 05
Date: 2020-08
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05019-01-05

MTG1

X1

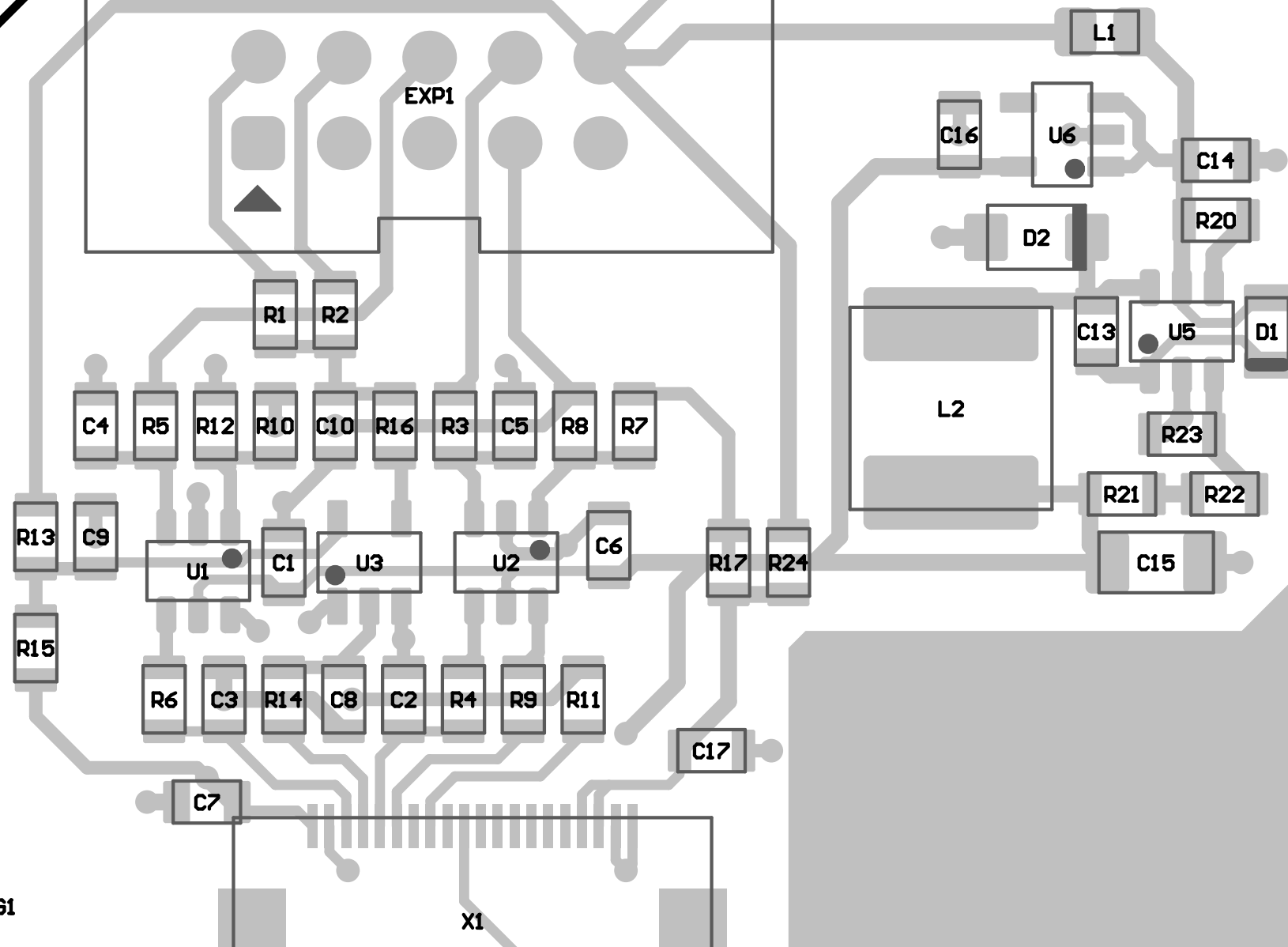
MTG2

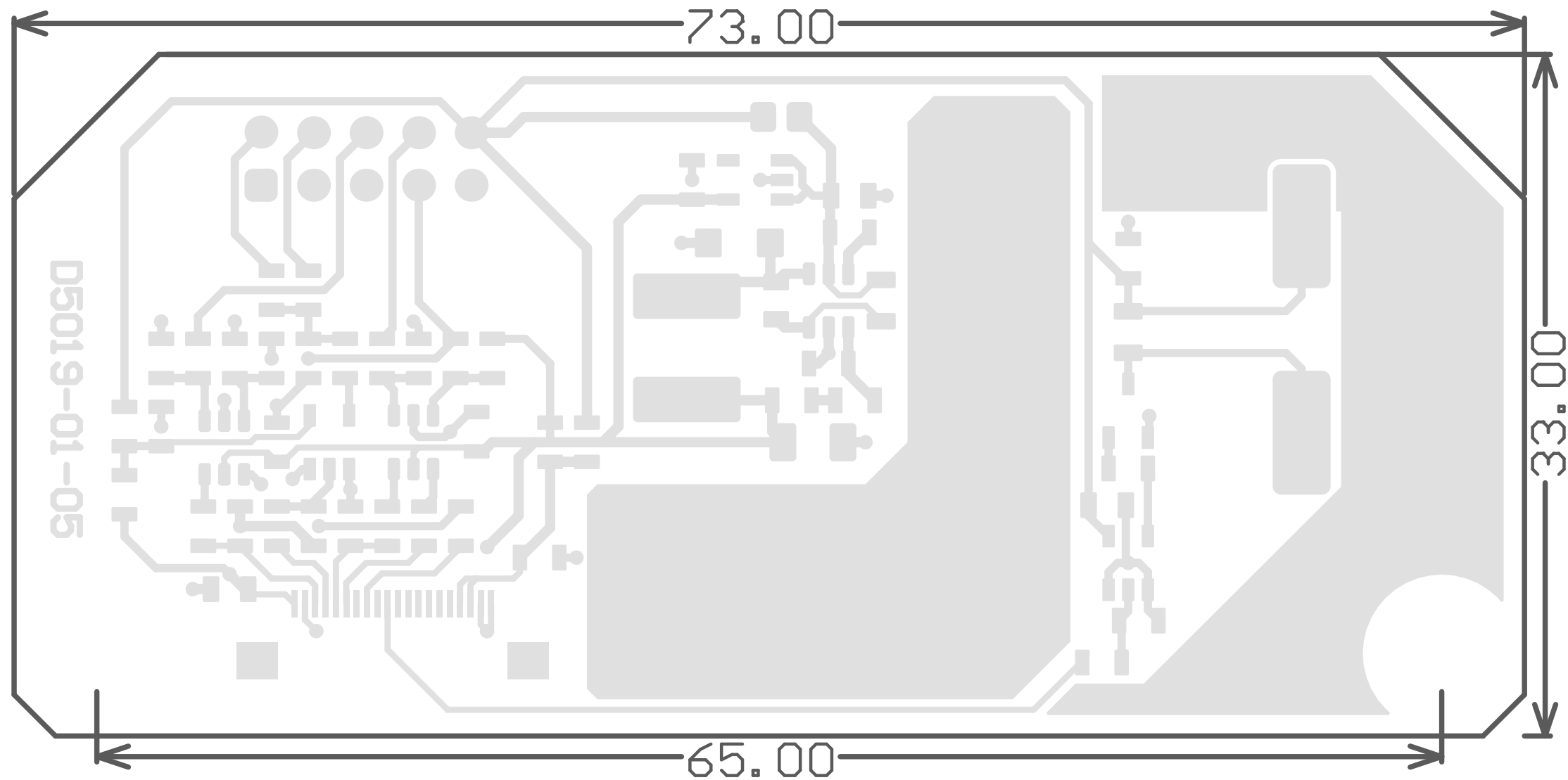
EXP1

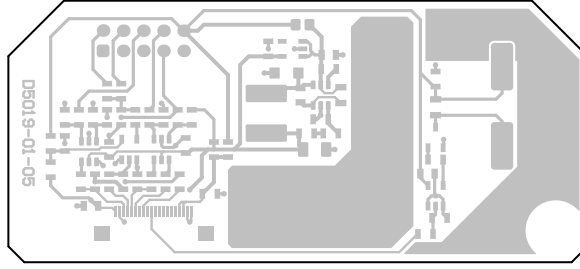
L2

L1

H1







D5019-01-05

MTG1

MTG2

