MCU module (2 x 20-pin)

Status: Mandatory

	A	Dir			B	Dir	
1	GND			2	GND		
3	UART_RX	I	Shared UART RX	4	UART_TX	O	Shared UART TX
5	+VAUX		Backup DC power	6	NRESET	O	Master reset (active low)
7	+3V3		DC power	8	NFAULT	I	Fault (active low)
9	CH3_IRQ	I	#3 IRQ	10	SYNC	O	Sync output
11	CH3_CSA	O	#3 Chip select A	12	SSCL	O	Shared I²C SCL
13	CH3_CSB	O	#3 Chip select B	14	SSDA	I/O	Shared I²C SDA
15	GND			16	GND		
17	CH3_SCLK	O	#3 SPI CLK	18	CH3_MISO	I	#3 MISO
19	CH2_IRQ	I	#2 IRQ	20	CH3_MOSI	O	#3 MOSI
21	CH2_CSB	O	#2 Chip select B	22	CH2_CSA	O	#2 Chip select A
23	CH2_SCLK	O	#2 SPI CLK	24	CH2_MISO	I	#2 MISO
25	CH1_IRQ	I	#1 IRQ	26	CH2_MOSI	O	#2 MOSI
27	CH1_CSB	O	#1 Chip select B	28	CH1_CSA	O	#1 Chip select A
29	GND			30	GND		
31	CH1_MISO	I	#1 MISO	32	CH1_SCLK	O	#1 SPI CLK
33	CH1_MOSI	O	#1 MOSI	34	GND		
35	+5V		DC power	36	+5V		DC power
37	+12V		DC power	38	+12V		DC power
39	GND			40	GND		

Peripheral modules (2 x 14-pin)

Status: Mandatory

	A	Dir			B	Dir	
1	UART_TX	O	Shared UART TX	2	UART_RX	I	Shared UART RX
3	GND			4	GND		
5	+5V		DC power	6	+5V		DC power
7	+12V		DC power	8	+12V		DC power
9	GND			10	GND		
11	SCLK	I	Module SPI CLK	12	NRESET	I	Master reset (active low)
13	MISO	O	Module MISO	14	NFAULT	I/O	Fault (active low)
15	GND			16	SSCL	I	Shared I²C SCL
17	MOSI	I	Module MOSI	18	SSDA	I/O	Shared I²C SDA
19	CSA	I	Module Chip select A	20	+3V3		DC power
21	CSB	I	Module Chip select B	22	+VAUX		Backup DC power
23	IRQ	O	Module IRQ	24	SYNC	I	Sync input
25	A1	I	I²C A1	26	A0	I	I²C A0
27	A2	I	I²C A2	28	BOOT	I	Bootloader select

AUX PS module (2 x 8-pin)

Status: Recommended

	A	Dir			B	Dir	
1	PE			2	MBOOT	O	Master bootloader select
3	+12V		DC power	4	+12V		DC power
5	+5V		DC power	6	+5V		DC power
7	GND			8	GND		
9	GND			10	+VAUX		Backup DC power
11	PWR_SSTART	I	AC soft-start	12	PWR_DIRECT	I	AC power on
13	SSCL	I	Shared I²C SCL	14	SSDA	I/O	Shared I²C SDA
15	NFAULT	I/O	Fault (active low)	16	+3V3		DC power

Power source module (2 x 10-pin)

Status: Optional

	A	Dir			B	Dir	
1	IN+	I	Power positive input	2	IN+	I	Power positive input
3	IN+	I	Power positive input	4	IN+	I	Power positive input
5	IN+	I	Power positive input	6	OUT+	O	Power positive output
7	OUT+	O	Power positive output	8	OUT+	O	Power positive output
9	OUT+	O	Power positive output	10	OUT+	O	Power positive output
11	OUT-	O	Power negative output	12	OUT-	O	Power negative output
13	OUT-	O	Power negative output	14	OUT-	O	Power negative output
15	OUT-	O	Power negative output	16	IN-	I	Power negative input
17	IN-	I	Power negative input	18	IN-	I	Power negative input
19	IN-	I	Power negative input	20	IN-	I	Power negative input

Notes:

If two or more modules have to be galvanically isolated (e.g. like in case of power modules with floating outputs) use appropriate isolators for control and data lines (e.g. Silabs Si86xx, Maxim MAX14850).