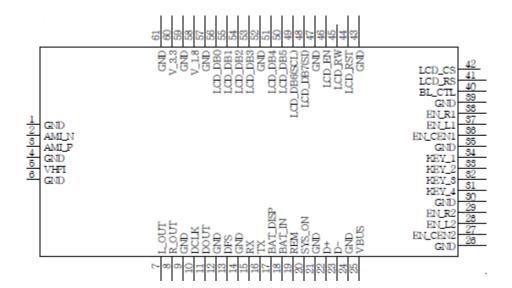


Si46xx SL200 Master Module Pinout

Version 2.0.2

Description:

The SL200 module is a Si46xx + C8051F380 based digital radio master module. The module controls the radio related I/O for the system: LCD, keypad, rotary encoders, etc. The connector is a custom, solderable, edge connect where the module lies directly on the system board.





Pin Number	Pin Name	<u>I/O</u>	Description
1	GND		
2	AMI_N	In	The AM negative input
3	AMI_P	In	The AM positive input
4	GND		RF Ground – no split plane
5	VHFI	In	The FM/DAB input signal
6	GND		
7	LOUT	Out	Analog Audio Out – Left
8	ROUT	Out	Analog Audio Out – Right
9	GND		
10	DCLK	In/Out	I2S Audio: Bit Clock (Configurable Direction)
11	DOUT	Out	I2S Audio: Audio Data
12	GND		
13	DFS	In/Out	I2S Audio: Frame Sync (Configurable Direction)
14	GND		
15	RX		Unused
16	TX		Unused
17	BAT_DISP	In	Digital indication that battery is present. 0 = External Source
			Applied (battery charging if applicable), 1 = Battery Only. Note: for best usage, the BAT_DISP signal should remain low any time there is external power, be sure to check your battery charger (if applicable) that its "charging" indication does not go high when the external power is present but no more charging is occurring.
18	BAT_IN	In	Analog Input for battery voltage measurement. Note: This voltage measurement should be adjusted to provide < 3.3V full scale voltage.
19	REM		Unused
20	SYS_ON	Out	Enable signal for 1.8V supply rail. Ensures MCU is started first.
21	GND		
22	USB_D+	In	(Optional) USB data+ for "field update" of MCU and digital radio firmware
23	USB_D-	In/Out	(Optional) USB data- for "field update" of MCU and digital radio firmware
24	GND		
25	VBUS	In	(Optional) +5V USB power rail for "field update" of MCU and digital radio firmware
26	GND		



27	EN_CEN2	In	Encoder 2 (Tune/Browse): Center Press. 0 = Pressed, 1 = Not Pressed
28	EN L2	In	Encoder 2 (Tune/Browse): Rotate Counter Clockwise
29	EN R2	In	Encoder 2 (Tune/Browse): Rotate Clockwise
30	GND		() , , , , , , , , , , , , , , , , , ,
31	KEY 4	In	Keypad (4 per row): Row 4
32	KEY 3	In	Keypad (4 per row): Row 3
33	KEY 2	In	Keypad (4 per row): Row 2
34	KEY 1	In	Keypad (4 per row): Row 1
35	GND		
36	EN CEN1	In	Encoder 1 (Volume): Center Press. 0 = Pressed, 1 = Not Pressed
37	EN L1	In	Encoder 1 (Volume): Rotate Counter Clockwise
38	EN R1	In	Encoder 1 (Volume): Rotate Clockwise
39	GND		
40	BL_CTL	Out	LCD: Hardware control of the LCD backlight: 0 = off, 1 = on.
	_		Note: this is a 3.3V output, LCD may require 5V I/O for
			backlight
41	LCD_RS	Out	LCD: Register Select
42	LCD_CS		Unused
4.0	CNID		
43	GND		
44	MUTE (was	Out	Hardware control for any Audio Amplifier hardware to mute
		Out	Hardware control for any Audio Amplifier hardware to mute output. 0 = Not Muted, 1 = Muted
	MUTE (was	Out	
44	MUTE (was LCD_RST)		output. 0 = Not Muted, 1 = Muted
44	MUTE (was LCD_RST) LCD_RW		output. 0 = Not Muted, 1 = Muted Unused
44 45 46	MUTE (was LCD_RST) LCD_RW LCD_EN	 Out	output. 0 = Not Muted, 1 = Muted Unused
44 45 46 47	MUTE (was LCD_RST) LCD_RW LCD_EN GND	 Out	output. 0 = Not Muted, 1 = Muted Unused LCD: Enable
44 45 46 47 48	MUTE (was LCD_RST) LCD_RW LCD_EN GND LCD_DB7	Out Out	output. 0 = Not Muted, 1 = Muted Unused LCD: Enable LCD: Data Bit 7
44 45 46 47 48 49	MUTE (was LCD_RST) LCD_RW LCD_EN GND LCD_DB7 LCD_DB6	Out Out Out Out	output. 0 = Not Muted, 1 = Muted Unused LCD: Enable LCD: Data Bit 7 LCD: Data Bit 6
44 45 46 47 48 49 50	MUTE (was LCD_RST) LCD_RW LCD_EN GND LCD_DB7 LCD_DB6 LCD_DB5	Out Out Out Out Out Out	output. 0 = Not Muted, 1 = Muted Unused LCD: Enable LCD: Data Bit 7 LCD: Data Bit 6 LCD: Data Bit 5
44 45 46 47 48 49 50 51	MUTE (was LCD_RST) LCD_RW LCD_EN GND LCD_DB7 LCD_DB6 LCD_DB5 LCD_DB4	Out Out Out Out Out Out	output. 0 = Not Muted, 1 = Muted Unused LCD: Enable LCD: Data Bit 7 LCD: Data Bit 6 LCD: Data Bit 5 LCD: Data Bit 4 LCD: Data Bit 3
44 45 46 47 48 49 50 51	MUTE (was LCD_RST) LCD_RW LCD_EN GND LCD_DB7 LCD_DB6 LCD_DB5 LCD_DB4 GND	Out Out Out Out Out Out Out Out	output. 0 = Not Muted, 1 = Muted Unused LCD: Enable LCD: Data Bit 7 LCD: Data Bit 6 LCD: Data Bit 5 LCD: Data Bit 4
44 45 46 47 48 49 50 51 52 53	MUTE (was LCD_RST) LCD_RW LCD_EN GND LCD_DB7 LCD_DB6 LCD_DB5 LCD_DB4 GND LCD_DB3	Out	output. 0 = Not Muted, 1 = Muted Unused LCD: Enable LCD: Data Bit 7 LCD: Data Bit 6 LCD: Data Bit 5 LCD: Data Bit 4 LCD: Data Bit 3
44 45 46 47 48 49 50 51 52 53	MUTE (was LCD_RST) LCD_RW LCD_EN GND LCD_DB7 LCD_DB6 LCD_DB5 LCD_DB4 GND LCD_DB3 LCD_DB3	Out	output. 0 = Not Muted, 1 = Muted Unused LCD: Enable LCD: Data Bit 7 LCD: Data Bit 6 LCD: Data Bit 5 LCD: Data Bit 4 LCD: Data Bit 3 LCD: Data Bit 2
44 45 46 47 48 49 50 51 52 53 54 55	MUTE (was LCD_RST) LCD_RW LCD_EN GND LCD_DB7 LCD_DB6 LCD_DB5 LCD_DB4 GND LCD_DB3 LCD_DB3 LCD_DB2 LCD_DB1	Out	output. 0 = Not Muted, 1 = Muted Unused LCD: Enable LCD: Data Bit 7 LCD: Data Bit 6 LCD: Data Bit 5 LCD: Data Bit 4 LCD: Data Bit 3 LCD: Data Bit 2 LCD: Data Bit 1
44 45 46 47 48 49 50 51 52 53 54 55 56	MUTE (was LCD_RST) LCD_RW LCD_EN GND LCD_DB7 LCD_DB6 LCD_DB5 LCD_DB4 GND LCD_DB3 LCD_DB2 LCD_DB1 LCD_DB0	Out	output. 0 = Not Muted, 1 = Muted Unused LCD: Enable LCD: Data Bit 7 LCD: Data Bit 6 LCD: Data Bit 5 LCD: Data Bit 4 LCD: Data Bit 3 LCD: Data Bit 2 LCD: Data Bit 1
44 45 46 47 48 49 50 51 52 53 54 55 56 57	MUTE (was LCD_RST) LCD_RW LCD_EN GND LCD_DB7 LCD_DB6 LCD_DB5 LCD_DB4 GND LCD_DB3 LCD_DB2 LCD_DB1 LCD_DB0 GND	Out	output. 0 = Not Muted, 1 = Muted Unused LCD: Enable LCD: Data Bit 7 LCD: Data Bit 6 LCD: Data Bit 5 LCD: Data Bit 4 LCD: Data Bit 3 LCD: Data Bit 2 LCD: Data Bit 1 LCD: Data Bit 0
44 45 46 47 48 49 50 51 52 53 54 55 56 57	MUTE (was LCD_RST) LCD_RW LCD_EN GND LCD_DB7 LCD_DB6 LCD_DB5 LCD_DB4 GND LCD_DB3 LCD_DB2 LCD_DB1 LCD_DB0 GND V_1.8	Out	output. 0 = Not Muted, 1 = Muted Unused LCD: Enable LCD: Data Bit 7 LCD: Data Bit 6 LCD: Data Bit 5 LCD: Data Bit 4 LCD: Data Bit 3 LCD: Data Bit 2 LCD: Data Bit 1 LCD: Data Bit 0