

SLM758

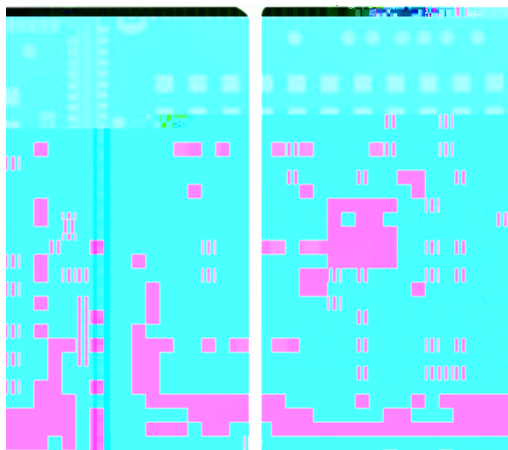
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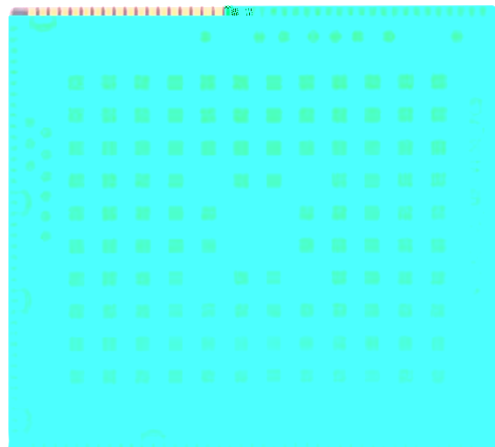
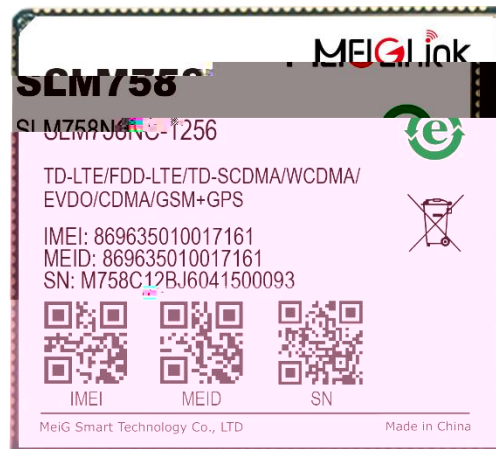
SLM758

V1.02

SLM758

_V1.02





1.

SLM758	600	MSM8953	CPU	14nm FinFET
64bit ARM	8 Cortex A-53	1.8Ghz/2.0Ghz/2.2Ghz		
Decode/encode	4K 30fps H.265	16GB/32GB/64GB		
	LTE			

TD-LTE/FDD-LTE/WCDMA/EVDO/TD-SCDMA/CDMA/GSM

SLM758 Android7.1

TD-LTE: 117/30Mbps

FDD-LTE: 150Mbps/50Mbps

WCDMA DC HSPA+: 42Mbps/5.76Mbps

EVDO EVDO RevA: 3.1Mbps/1.8Mbps

TD-SCDMA HSPA: 4.2Mbps/2.2Mbps

CDMA1x: 153.6kbps/153.6kbps

GSM EDGE: 236.8kbps/236.8kbps

SLM758

2.4G/5G WiFi

BT	GPS	1300W	3D
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POS VR Camera

2.

		“ * ”
		Qualcomm MSM8953
CPU	Octa-core A53 (64bit) 8*2.0GHz SLM758N	
	*Octa-core A53 (64bit) 8*1.8GHz SLM758L	
	*Octa-core A53 (64bit) 8*2.2GHz SLM758P	
GPU		Adreno506; 650MHz
		16GB eMMC + 2GB LPDDR3 933Mhz
		* 32GB+4GB memory
		Android 7.1
		41.0x45.5x3.0mm 160pinLCC + 112pin LGA
		-30~75 ° C
		-40~85 ° C
		TDD-LTE: B38/39/40/41 FDD-LTE: B1/3/5/8 TD-SCDMA: B34/39 WCDMA: B1/5/8 EVDO: BC0 CDMA: BC0 GSM: B5/3/8
Wi-Fi	IEEE 802.11 a/b/g/n 2.4G&5G	
	* 11ac	
	* 5G FEM	
Bluetooth		BT4.1
GNSS		GPS/Beidou/Glonass/Galileo
	TD-LTE	Cat4 TD-LTE 117/30Mbps
	FDD-LTE	Cat4 FDD-LTE 150/50Mbps
	DC-HSPA+	42/11.2Mbps
	TD-HSPA	2.8/2.3Mbps
	EVDO Rev.A	3.1/1.8Mbps
	EDGE	Class12, 236.8kbps/236.8kbps
	GPRS	Class12, 85.6kbps/85.6kbps
SIM	DSDS	
	3.0/1.8V	
	SIM	

	LW/G/T+G LW/G/T+W LW/G/T+1X L/EVDO/CDMA1X+G CDMA			
Display	Matrix: FULL HD: 1920*1200 60fps;			
	LCM Size: User defined			
	Interface: 1st LCM MIPI DSI 4-lane; 2nd LCM MIPI DSI 4-lane			
Camera	Interface: CSI 4-Lane			
	Pixel:	13-24Mp/	up to 13Mp	ISP 13MP
	Camera			
	Video decode	4K 30fps SLM758L , 1080p 60fps, H.264/H.265 MP4/ WMV9/ VC1/ DivX/ VP8/VP9		
	Video encode	4K 30fps SLM758L ,1080p 60 fps: H.264/ H.265/ MP4/ VP8 1080P 60fps De +1080p 30fps En SLM758L		
	home + -			
	TP			
Reset				
	VBAT	3pin		Ū

		5G WiFi-
	Audio	1 MIC
		1 MIC
		1 0.8W D
		1

3.

SLM758-E	TDD-LTE: B38/40/41 FDD-LTE: B1/3/5/7/8/20 WCDMA: B1/B5/B8 GSM: B5/3/8
SLM758-A	FDD-LTE B2/4/5/7/12/13/17/28b WCDMA B2/4/5
SLM758-J	FDD-LTE B1/3/8/9/19/26/28 WCDMA B1/8/9/19

4.SLM758

SLM758 272pin

PIN#	SLM758 Pin name	Pad characteristics	Functional description
1	GND	GND	GND
2	FLASH_LED1+	AO	FLASH LED anode(1A)
3	GND	GND	GND
4	PMI8952_MPP1	AO-Z,AI,DO	Configurable MPP,PWM,ADC
5	LCD_BL_LED_K1	AI	LCD Backlight cathode1(20mA)
6	LCD_BL_LED_K2	AI	LCD Backlight cathode2(20mA)
7	LCD_BL_LED_A	PO	LCD Backlight anode
8	PMI_HAP_OUT_N	AO	Haptics driver output negative
9	PMI_HAP_OUT_P	AO	Haptics driver output positive
10	GND	GND	GND
11	UART2_MSM_TX	B-PD:nppukp	Configurable I/O,UART2 TX
12	UART2_MSM_RX	B-PD:nppukp	Configurable I/O,UART2 RX
13	GPIO6_I2C2_SDA	B-PD:nppukp	Configurable I/O, I2C SDA
14	GPIO7_I2C2_SCL	B-PD:nppukp	Configurable I/O, I2C SCL
15	GPIO12_UART4_TX	B-PD:nppukp	Configurable I/O,UART4 TX
16	GPIO13_UART4_RX	B-PD:nppukp	Configurable I/O,UART4 RX
17	GPIO14_SENSOR_I2C4_SDA	B-PD:nppukp	Configurable I/O,SENSOR I2C SDA
18	GPIO15_SENSOR_I2C4_SCL	B-PD:nppukp	Configurable I/O, SENSOR I2C SCL
19	GPIO42_ACCL_INT1	B-PD:nppukp	Configurable I/O,ACC INT
20	GPIO43_ALSP_INT_N	B-PD:nppukp	

			MI2S1_D1
28	GND	GND	GND
29	VREG_L11_2P95	PO	PMIC output 2.95V for SD-card power
30	VREG_L12_PX2_2P95	PO	PMIC output 2.95V for SDC2 signal
31	GPIO133_SDCARD_DET_N	B-PD:nppukp	Configurable I/O,SD card detection
32	SDC2_SDCARD_D0	BH-NP:pdpu kp	Secure digital controller 2 data bit 0
33	SDC2_SDCARD_D1	BH-NP:pdpu kp	Secure digital controller 2 data bit 1
34	SDC2_SDCARD_D2	BH-NP:pdpu kp	Secure digital controller 2 data bit 2
35	SDC2_SDCARD_D3	BH-NP:pdpu kp	Secure digital controller 2 data bit 3
36	SDC2_SDCARD_CMD	BH-NP:pdpu kp	Secure digital controller 2 command
37	SDC2_SDCARD_CLK	BH-NP:pdpu kp	Secure digital controller 2 clock
38	GND	GND	GND
39	GND	GND	GND
40	MIPI_CSI2_CLK_P	AI	MIPI camera serial interface 2 clock+
41	MIPI_CSI2_CLK_N	AI	MIPI camera serial interface 2 clock-
42	MIPI_CSI2_LANE0_P	AI	MIPI camera serial interface 2 lane0+
43	MIPI_CSI2_LANE0_N	AI	MIPI camera serial interface 2 lane0-
44	MIPI_CSI2_LANE3_P	AI	MIPI camera serial interface 2 lane3+
45	MIPI_CSI2_LANE3_N	AI	MIPI camera serial interface 2 lane3-
46	MIPI_CSI2_LANE2_P	AI	MIPI camera serial interface 2 lane2+
47	MIPI_CSI2_LANE2_N	AI	MIPI camera serial interface 2 lane2-
48	GND	GND	GND
49	MIPI_CSI0_CLK_P	AI	MIPI camera serial interface 0 clock+
50	MIPI_CSI0_CLK_N	AI	MIPI camera serial interface 0 clock-
51	MIPI_CSI0_LANE2_P	AI	MIPI camera serial interface 0 lane2+
52	MIPI_CSI0_LANE2_N	AI	MIPI camera serial interface 0 lane2-
53	MIPI_CSI0_LANE3_P	AI	MIPI camera serial interface 0 lane3+
54	MIPI_CSI0_LANE3_N	AI	MIPI camera serial interface 0 lane3-
55	MIPI_CSI0_LANE0_P	AI	MIPI camera serial interface 0 lane0+
56	MIPI_CSI0_LANE0_N	AI	MIPI camera serial interface 0 lane0-
57	GND	GND	GND
58	MIPI_CSI1_LANE1_P	AI	MIPI camera serial interface 1 lane1+
59	MIPI_CSI1_LANE1_N	AI	MIPI camera serial interface 1 lane1-
60	MIPI_CSI1_LANE3_P	AI	MIPI camera serial interface 1 lane3+

95	CAM_I2C_SCL1	B-PD:nppukp	Configurable I/O, Dedicated camera I2C1 SCL
96	CAM_I2C_SDA1	B-PD:nppukp	Configurable I/O, Dedicated camera I2C1 SDA
97	GPIO65_TP_INT_N	B-PD:nppukp	Configurable I/O,TP INT
98	GPIO64_TP_RST_N	B-PD:nppukp	Configurable I/O,TP RESET
99	GPIO63	B-PD:nppukp	Configurable I/O,
100	GPIO59	B-PD:nppukp	Configurable I/O,
101	GND	GND	GND
102	DIV_ANT	AI	RF signal for diversity ANT
103	GND	GND	GND
104	CAM_I2C_SCL0	B-PD:nppukp	Configurable I/O, Dedicated camera I2C0 SCL
105	CAM_I2C_SDA0	B-PD:nppukp	Configurable I/O, Dedicated camera I2C0 SDA
106	GPIO54_UIM1_DET	B-PD:nppukp	Configurable I/O,UIM1 removal detection
107	UIM1_RESET	B-PD:nppukp	Configurable I/O,UIM1 reset
108	UIM1_CLK	B-PD:nppukp	Configurable I/O,UIM1 clock
109	UIM1_DATA	B-PD:nppukp	Configurable I/O,UIM1 data
110	VREG_L14_UIM1	PO	PMIC output for UIM1
111	GND	GND	GND
112	PM8953_MPP2	AO-Z,DI,DO	Configurable MPP,PWM,ADC
113	VCOIN	AI,AO	Coin-cell battery or backup battery
114	LINEOUT_M	AO	Audio lineout minus for audio PA
115	LINEOUT_P	AO	Audio lineout plus for audio PA
116	GND	GND	GND
117	MIC_BIAS2	AO	Microphone bias #2 for earphone mic
118	MIC_BIAS1	AO	Microphone bias #1
119	GND	GND	GND
120	MAIN_ANT	AI	RF signal for main ANT
121	GND	GND	GND
122	MIC_IN1_P	AI	Microphone 1 input plus
123	MIC_IN1_M	AI	Microphone 1 input minus
124	GND_MIC	GND	Microphone bias filter ground
125	CDC_HS_DET	AI	MBHC mechanical

			insertion/removal-detection
126	CDC_HPH_L	AO	Headphone output, left channel
127	CDC_HPH_REF	AI	Headphone ground reference
128	CDC_HPH_R	AO	Headphone output, right channel
129	CDC_EAR_M	AO	Earpiece output, minus
130	CDC_EAR_P	AO	Earpiece output, plus
131	MIC_IN3_P	AI	Microphone input 3
132	MIC_IN2_P	AI	Microphone input 2
133	SPKR_DRV_M	AO	Class-D speaker driver output, minus
134	SPKR_DRV_P	AO	Class-D speaker driver output, plus
135	GND	GND	GND
136	VREG_L22_2P8	PO	PMIC output 2.8V for camera AVDD
137	VREG_L17_2P85	PO	PMIC output 2.8V for LCD,CAM,TP
138	VREG_L10_2P8_SENSOR	PO	PMIC output 2.8V for sensor
139	VREG_L6_1P8	PO	PMIC output 1.8V for LCD,CAM,TP, sensor
140	VREG_L5_1P8	PO	PMIC output 1.8V for digital I/Os
141	PM_RESIN_N1	DI	KEY RESET or VOL-
142	KYPD_PWR_N1	DI	KEY POWER ON/OFF
143	USB_ID	AI	USB ID
144	GND	GND	GND
145	USB_HS_D_M	AI,AO	USB data minus
146	USB_HS_D_P	AI,AO	USB data plus
147	GND	GND	GND
148	BAT_CON_ID	AI	Battery ID input to ADC
149	BAT_THERM	AI	Battery temperature input to ADC
150	GND	GND	GND
151	VBAT	PI,PO	Battery,3.5V-4.2V,default 3.8V
152	VBAT	PI,PO	Battery,3.5V-4.2V,default 3.8V
153	VBAT	PI,PO	Battery,3.5V-4.2V,default 3.8V
154	GND	GND	GND
155	GND	GND	GND
156	GND	GND	GND
157	VBUS	PI,PO	USB Voltage
158	VBUS	PI,PO	USB Voltage

159	VBUS	PI,PO	USB Voltage
160	GND	GND	GND
161	GND	GND	GND
162	Reserved		Reserved
163	Reserved		Reserved
164	GPIO98_I2C8_SDA	B-PD:nppukp	Configurable I/O, I2C SDA
165	GPIO99_I2C8_SCL	B-PD:nppukp	Configurable I/O, I2C SCL
166	GPIO33	B-PD:nppukp	Configurable I/O
167	GPIO35	B-PD:nppukp	Configurable I/O
168	GPIO36	B-PD:nppukp	Configurable I/O
169	GPIO91_MI2S_1_SCK	B-PD:nppukp	Configurable I/O,MI2S1_SCK
170	GND	GND	GND
171	MIPI_CSI1_LANE2_P	AI	MIPI camera serial interface 1 lane2+
172	MIPI_CSI1_LANE2_N	AI	MIPI camera serial interface 1 lane2-
173	USB3_SS_RX_M	AI	USB super-speed receive – minus
174	USB3_SS_RX_P	AI	USB super-speed receive – plus
175	GND	GND	GND
176	GPIO20_UART6_TX	B-PD:nppukp	Configurable I/O,UART6 TX
177	GPIO21_UART6_RX	B-PD:nppukp	Configurable I/O,UART6 RX

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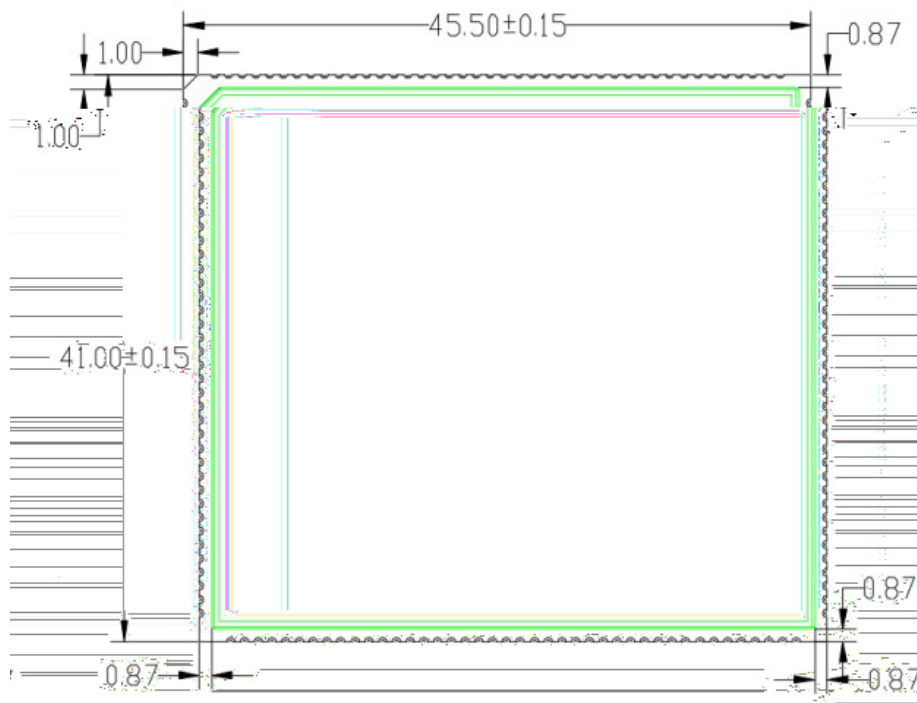
193	MIPI_CSI0_LANE1_P	AI	MIPI camera serial interface 0 lane1+
194	MIPI_CSI0_LANE1_N	AI	MIPI camera serial interface 0 lane1-
195	GPIO94	B-PD:nppukp	Configurable I/O
196	GPIO95	B-PD:nppukp	Configurable I/O
197	GPIO96	B-PD:nppukp	Configurable I/O
198	GPIO97	B-PD:nppukp	Configurable I/O
199	VREG_L2_1P1	PO	PMIC output 1.1V for main camera DVDD
200	VREG_L23_1P175	PO	PMIC output 1.175V for front camera DVDD
201	USB_CC1	AI;AO	USB type C connector configuration channel1
202	USB_CC2	AI;AO	USB type C connector configuration channel2
203	CBL_PWR_N1	DI	Cable power-on;
204	GPIO89	B-PD:nppukp	Configurable I/O
205	GPIO90	B-PD:nppukp	Configurable I/O
206	FORCE_USB_BOOT	DI	pullup with VREG_L5 to forced USB boot
207	MIPI_CSI1_CLK_N	AI	MIPI camera serial interface 1 clock-
208	MIPI_CSI1_CLK_P	AI	MIPI camera serial interface 1 clock-
209	PM8953_MPP4	AO-Z,DI,DO	Configurable MPP,PWM,ADC
210	GND	GND	GND
211	GND	GND	GND
212	GPIO66	B-PD:nppukp	Configurable I/O
213	GND	GND	GND
214	GND	GND	GND
215	GND	GND	GND
216	GND	GND	GND
217	VREG_L13_3P075	PO	PMIC output 3.075V for audio codec
218	GND	GND	GND
219	VREG_S4_2P05	PO	PMIC output 2.05V for audio codec
220	GND	GND	GND
221	GPIO46_PRESSURE_INT	B-PD:nppukp	Configurable I/O, Pressure INT
222	GND	GND	GND
223	GND	GND	GND

224	GND	GND	GND
225	MIPI_DSI1_LANE0_P	AO	MIPI display serial interface 1 lane0+
226	MIPI_DSI1_LANE0_N	AO	MIPI display serial interface 1 lane0-
227	WCD_RF_PA_ON	B-PD:nppukp	WCD9326_RF_PA_ON
228	GPIO50	B-PD:nppukp	Configurable I/O, WCD_ELDO_EN
229	WCD_MSM_MCLK	B-PD:nppukp	WCD9326_MSM_MCLK
230	WCD_RST_N	B-PD:nppukp	WCD9326_RST_N
231	GPIO9	B-PD:nppukp	Configurable I/O,
232	GPIO8	B-PD:nppukp	Configurable I/O,
233	GPIO11_TP_I2C3_SCL	B-PD:nppukp	Configurable I/O, CTP I2C_SCL
234	GPIO10_TP_I2C3_SDA		

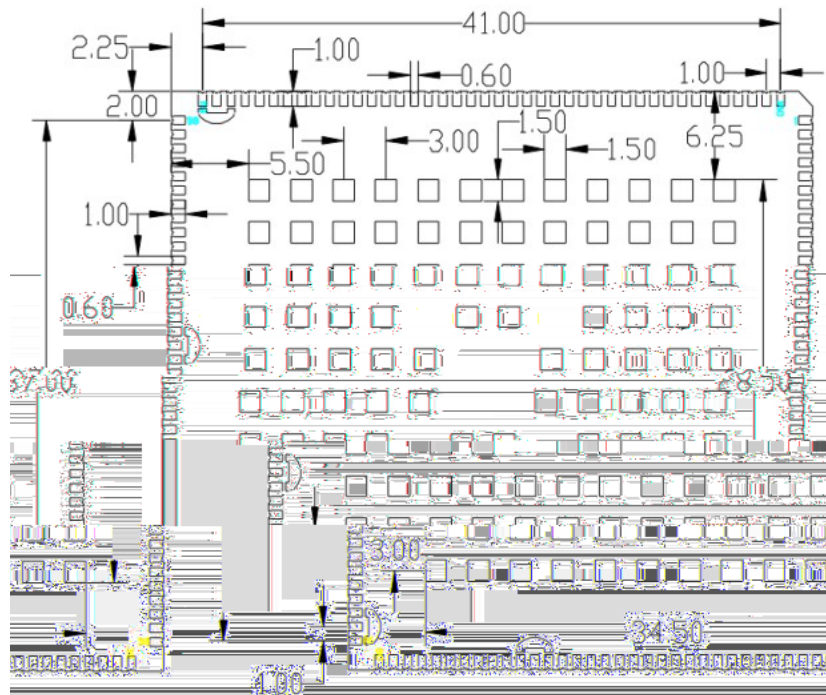
258	GPIO3_SPI1_CLK	B-PD:nppukp	Configurable I/O, SPI CLK
259	GPIO2_SPI1_CS	B-PD:nppukp	Configurable I/O, SPI CS
260	GPIO1_SPI_MISO	B-PD:nppukp	Configurable I/O, SPI MISO
261	GPIO0_SPI_MOSI	B-PD:nppukp	Configurable I/O, SPI MOSI
262	GPIO132_DCAM_PWD_N	B-PD:nppukp	Configurable I/O, Depth camera pwn
263	GPIO131_DCAM_RST_N	B-PD:nppukp	Configurable I/O, Depth camera reset
264	GPIO28_CAM_MCLK2	B-PD:nppukp	Configurable I/O, Depth camera MCLK
265	GPIO93_MI2S_1_D0	B-PD:nppukp	Configurable I/O, MI2S1_D0
266	GPIO138_FP_SPI_MISO	B-PD:nppukp	Configurable I/O, fingerprint SPI MISO
267	GPIO137_FP_SPI_MOSI	B-PD:nppukp	Configurable I/O, fingerprint SPI MOSI
268	GPIO136_FP_SPI_CS	B-PD:nppukp	Configurable I/O, fingerprint SPI CS
269	GPIO135_FP_SPI_CLK	B-PD:nppukp	Configurable I/O, fingerprint SPI CLK
270	GPIO48_FP_INT_N	B-PD:nppukp	Configurable I/O, fingerprint INT
271	GPIO92_MI2S_1_WS	B-PD:nppukp	Configurable I/O, MI2S1_WS
272	GND	GND	GND

2D

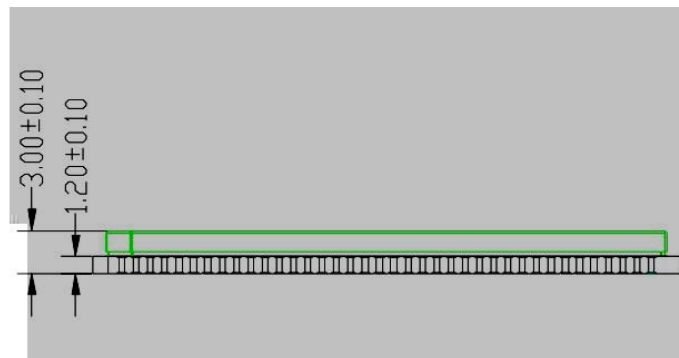
TOP



BOTTOM:



Side:



6.PIN

