# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





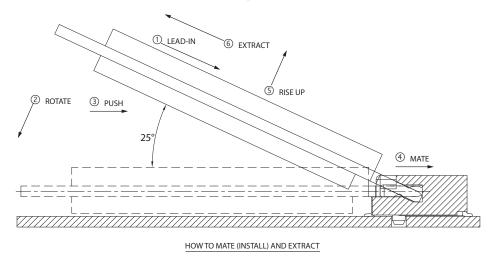
### >> M.2 Development Kit

#### **Kit Contents**

- (1) M.2 development kit printed circuit assembly
- (2) Ultra-wideband 4G dipole swivel terminal antennas
- (6) RF cables—MHF4 micro coaxial cables (3 for Main/AUX/GNSS, 3 spares)
- (1) MHF4L connector push/pull tool
- (1) USB cable (Type A to micro-B 3.0)
- (1) AC wall adapter power supply and international plug kit
- (1) micro-SIM to SIM adapter
- (2) Thermal pads (1 to install on heat shield, 1 spare). Pad type: 29.0 x 39.5mm TENNVAC GP5000
- (2) M2x3 Phillips head module screws (1 to install module, 1 spare)

#### Module Insertion

- 1. Remove backing from the thermal pad (both sides), and position the thermal pad on the heat sink.
- 2. Insert the module as shown. (Insert at a 25° angle, rotate down, and push fully into the connector.)



MATE:  $1 \rightarrow 4$ EXTRACT:  $5 \rightarrow 6$ 

**3.** Secure the module with an M2 screw.

#### **SIM Card Connection**

- 1. Slide the SIM card into CN202 (top left corner of the PCB), noting the location of the notched corner. (If ESIM is enabled, DO NOT use a SIM in CN202.)
- 2. If supporting dual SIMs, insert a second SIM card into CN206.

#### Power Source Selection

Connector	Jump	Description	Connector(s) to use	
CN101 (PWR IN SELECT)	Pins 1 & 2	Power provided by barrel jack (AC adapter)	CN103	
	Pins 3 & 4	Power provided by banana jack (3.125–4.4VDC) Disable on-board LDO	CN114 (VCC) & CN116, or CN115 (VCC_MODULE) & CN116	
	Pins 5 & 6	Power provided by USB cable	CN105	

11 8 2 8

#### **Switch Settings**

Switch	Position	Default	Operation	Description		
SW100	1	Off	3.0V	Select voltage for EM module (When selected power source is barrel jack or USB cable)		
	2	On	3.3V			
	3	Off	3.6V			
	4	Off	4.2V			
SW200	1	Off	SIM DETECT 1	On=Ignore SIM 1 Detect; Off=Normal mode		
	2	Off	SIM DETECT 2	On=Ignore SIM 2 Detect; Off=Normal mode		
	3	Off	ESIM ENABLE	On=Enable ESIM; Off=Disable ESIM (Note: Leave switch in OFF position; ESIM is not populated.)		
	4	Off	W_Disable1_N	On=Set to logic low; Off=Set to logic high		
	5	Off	W_Disable2_N	On=Set to logic low; Off=Set to logic high		
	6	Off	DPR	On=Set to logic low; Off=Set to logic high		
	7	Off	SIM2 DISABLE	On=Disable SIM 2; Off=Enable SIM 2		
	8	On	Power ON	On=Enable module; Off=Disable module		
	9	On	Enable 1.8V—VCC Module	On=Enable 1.8V; Off=Disable 1.8V		
	10	Off	NC	Not connected		
SW201	Button switch			Reset Module		

#### **Test Points**

Connector	Pin #	Description	Connector	Pin #	Description
CN207	1	NC	CN208	1	NC
	2	POWER_OFF		2	GND
	3	NC		3	VBAT
	4	W_DISABLE_N		4	NC
	5	NC		5	PCM_CLK
	6	W_DISABLE2_N	_	6	UIM1_DET
	7	VBAT	_	7	PCM_DIN
	8	WAKE_ON_WWAN_N	_	8	RESET_N
	9	UIM2_RST	_	9	PCM_OUT
	10	UIM1_CLK		10	WWAN_LED
	11	UIM2_CLK		11	PCM_SYNC
	12	UIM_RST		12	I2C_DATA
	13	UIM2_DATA		13	NC
	14	UIM_DATA		14	ANT_CTL0
	15	UIM2_VCC	_	15	NC
	16	UIM_VCC		16	ANT_CTL1
	17	COEX3		17	UIM2_DET
	18	DPR		18	ANT_CTL2
	19	UART_RXD		19	I2C_CLK
	20	UART_TXD		20	ANT_CTL3