

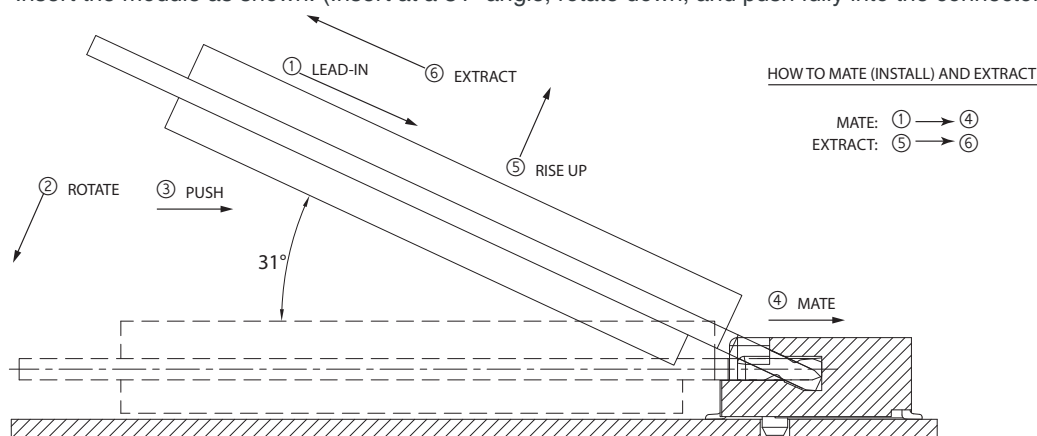
## MiniCard (MC) Development Kit

### Kit Contents

- (1) MC-series development kit printed circuit assembly
- (2) Ultra-wideband 4G dipole swivel terminal antennas
- (6) RF cables—U.FL micro coaxial cables (3 for Main/AUX/GNSS, 3 spares)
- (1) U.FL 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: 30.5 x 44.0 mm TENNVAC GP5000
- (3) M2x3 Phillips head module screws (2 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 31° angle, rotate down, and push fully into the connector.)



3. Secure the module with two M2 screws.

### 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	Power 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 (Default jumper location)	CN105
CN117 CONNECT MAIN VCC	Pins 1 & 2	Jumper required when selected power type is AC adapter or USB cable. Remove the jumper to isolate module power from other circuits on the board.	

## Switch Settings

Switch	Position	Default	Operation	Description
SW100	1	Off	3.0V	Select voltage for MC 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	W_Disable_N	On=Set to logic low; Off=Set to logic high
	2	On	LDO_EN	On=Enable on-board bias voltage Off=Disable on-board bias voltage
	3	On	LDO_CODEC_EN	On=Enable codec supply voltage Off=Disable codec supply voltage
	4	Off	ESIM_Reset	On=ESIM in reset mode; Off=ESIM in active mode (ESIM support will be implemented in a future revision.)
	5	Off	DPR input	On=DPR low; Off=DPR high
	6	NC	NC	No connect
	7	NC	NC	No connect
	8	NC	NC	No connect
	9	NC	NC	No connect
	10	NC	NC	No connect
SW201	Button switch			Reset Module

## Test Points

Connector	Pin #	Description
CN207	1	Ground
	2	NC
	3	On-board 1.8V
	4	W_DISABLE_N
	5	Module 1.8V
	6	NC
	7	On-board module LDO
	8	WAKE_ON_WWAN_N
	9	UIM2_RST
	10	UIM1_CLK
	11	UIM2_CLK
	12	UIM1_RST
	13	UIM2_DATA
	14	UIM1_DATA
	15	UIM2_PWR
	16	UIM1_PWR
	17	NC
	18	DPR
	19	NC
	20	NC

Connector	Pin #	Description
CN208	1	NC
	2	Ground
	3	On-board module LDO
	4	NC
	5	PCM_CLK
	6	UIM1_DET
	7	PCM_DIN
	8	RESET_N
	9	PCM_DOUT
	10	WWAN_LED_N
	11	PCM_SYNC
	12	I2C_DATA
	13	NC
	14	NC
	15	NC
	16	RFFE_DATA
	17	UIM2_DET
	18	RFFE_CLK
	19	I2C_CLK
	20	RFFE_VIO