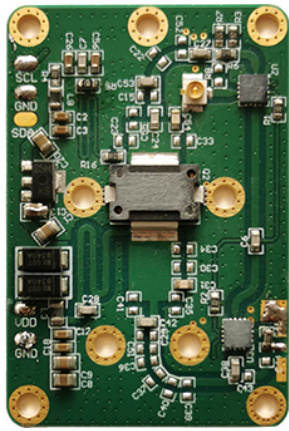
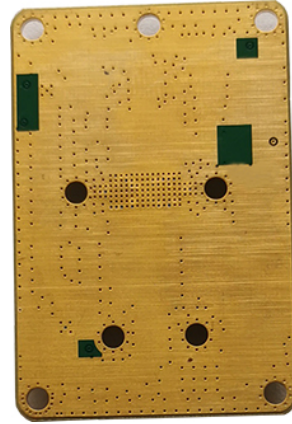


## PA1405/PA805 for DLB/DLM Module

5W RF Linear Power Amplifier for Sihid DLB/DLM module



Front

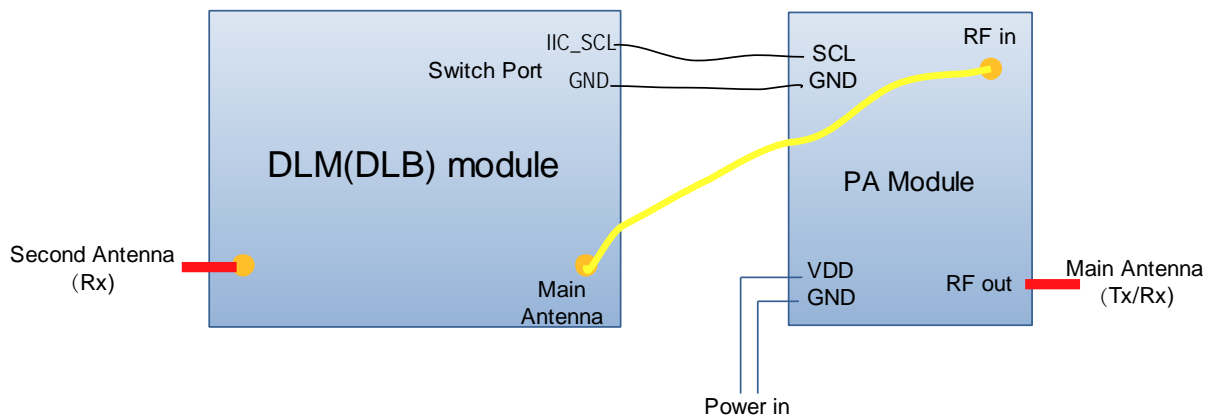


Back

### Features:

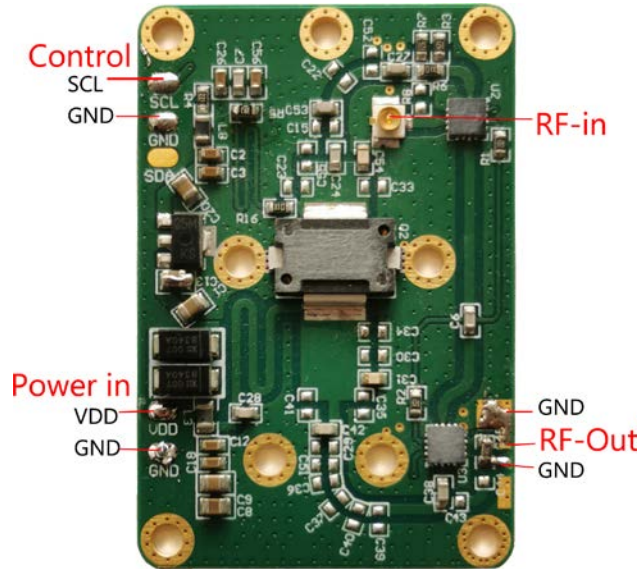
- Frequency band: 1425MHz-1455MHz(PA1405) , 800MHz-830MHz(PA805)
- RF in: Sihid DLB/DLM module RF out( $25 \pm 2$ dBm)
- RF out power: 5W(37dBm)
- TX Gain:
  - PA1405:15dB, when used with DLB/DLM Module, set up the maximum RF power of DLB/DLM as 22~25 dBm, then the RF out power will be 37~39dbm.
  - PA805: 17dB, when used with DLB/DLM Module, set up the maximum RF power of DLB/DLM as 20~23 dBm, then the RF out power will be 37~39dbm.
- Power in: DC24V~25V, minimum 1.8A@24V power current rating
- Power consumption: <14W average
- PCBA size: 46.5\*31mm, thickness of PCB: 1.2mm

### Working together with DLB/DLM Module:



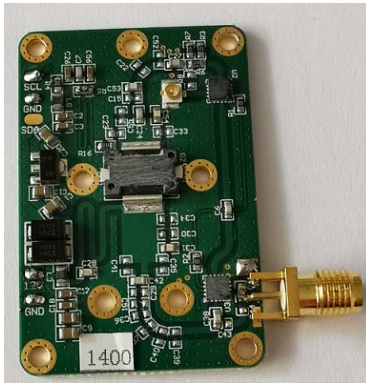
### RF in

UFL(IPEX) connector for connection with main antenna of DLB/DLM module.



**RF out**

Bonding pad, should be soldered to the main antenna connector.



**Control**

Two bonding pads, should be soldered to connect with DLM(or DLB) Switch signal pad(SCL and GND).

Control signal	function	Connection to DLB/DLM
SCL	The input high(1.8V to 3.3V) will drive the amplifier and work in Tx mode. The input low will enable the PA module to work in Rx mode.	SCL signal of Switch port
GND	Gnd.	GND signal of Switch port

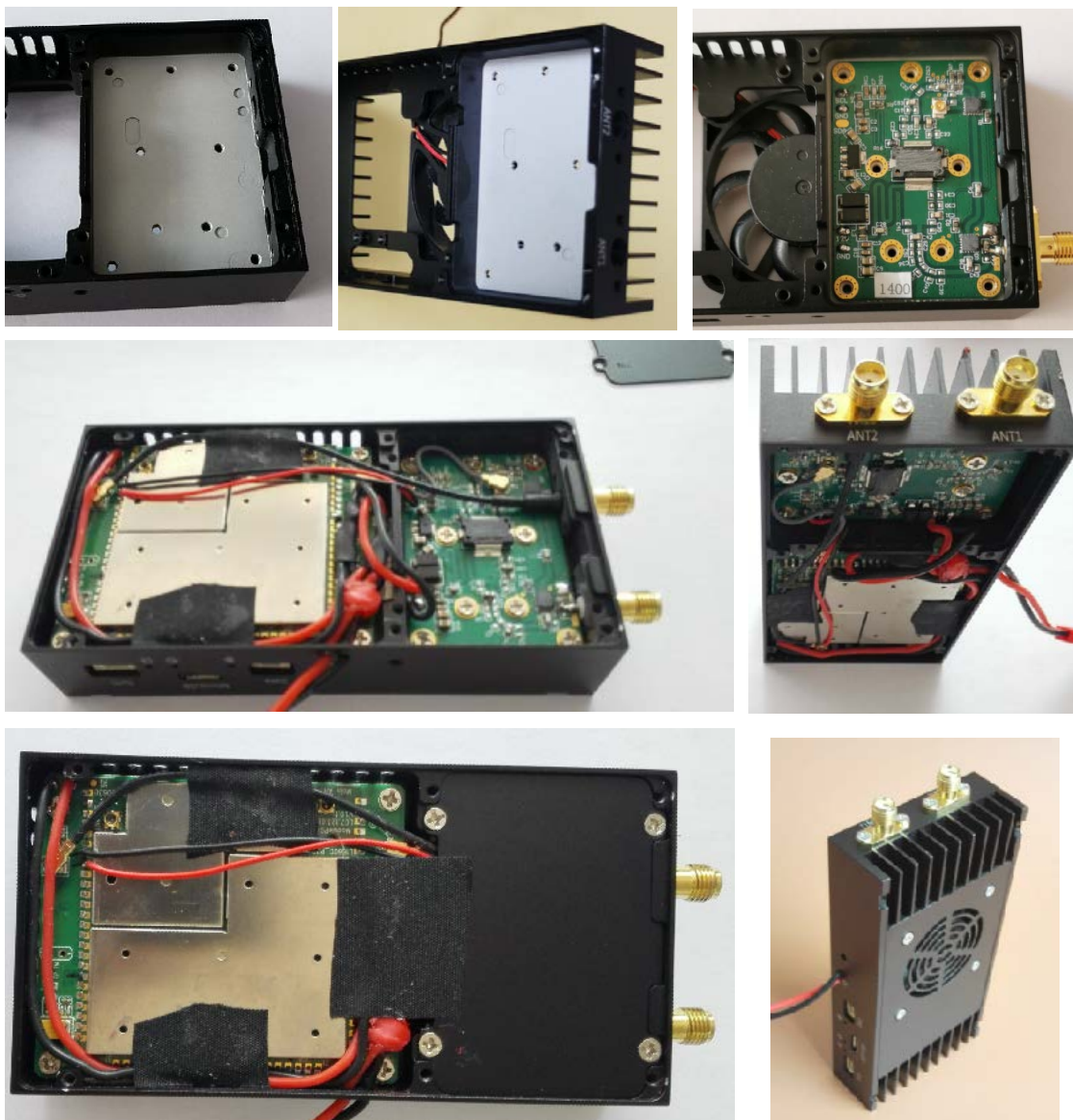
**Power in**

Two bonding pads, should be soldered to connect with power VDD and GND.

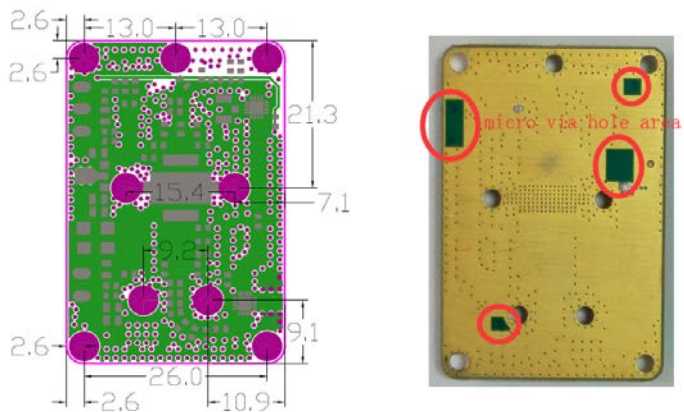
**Housing case and assemble**

Sihid PA1405/PA805 is just an OEM PCBA module. When you use this PA to work with DLM(or DLB) module, you should make metal housing case for your device, and a separated chamber must be designed for PA board. And also, it should keep at least 6mm space between the PA board and the upper cover. The back side of the PA board should be assembled to the metal directly and tightly to help heat dissipation and enable electrical grounding connection. For optimal performance it is important to include adequate heat dissipation strategies that incorporate a heat sink or fan into any designs that integrate the PA OEM module.

Below is an example of PA chamber with heat dissipation that incorporate a heat sink and fan.

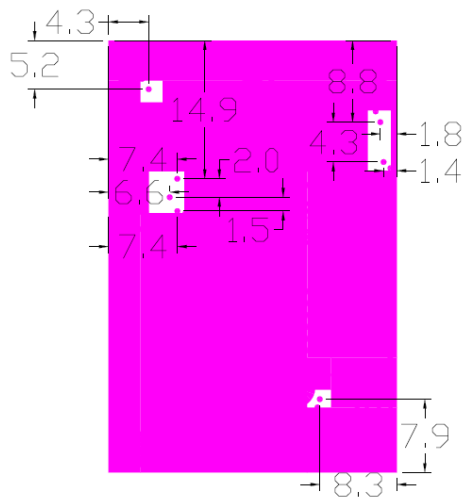
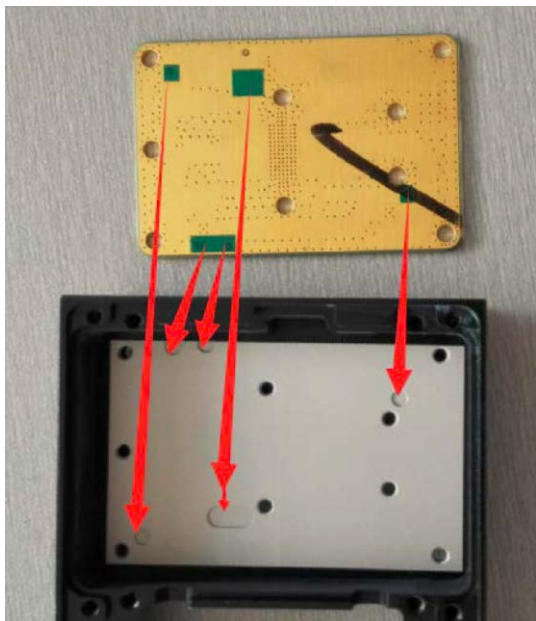


**PA1405/PA805 board size(mm)**



There are some micro via holes on the back of the PA board(green color area). It covers with green oil to

avoid electrical grounding connection. If the green oil was abraded during board assembling (normally it will not), the metal case should make special holes to avoid electrical grounding connection of the micro via holes. Below metal case shows this dealing(mm).



#### AT command to set RF power of DLB/DLM

Center node: AT^DRPS=,"23" ; RF power=23

Access Node: AT^DSSMTP="23" ; Max RF power=23