

Statement

We Quectel Wireless Solutions Co., Ltd declare the following models:

Product Name: LTE Module

Model Number: EC21-A_R1.0, EC21-A_R2.0

Hardware Version: R1.0,R2.0

EC21-A_R1.0 and EC21-A_R2.0 share the similar HW and SW design, the difference is just as follow:

- 1、The manufacturer of Band2 duplex(U0901) is TAIYO for EC21-A R1.0, however the manufacturer of Band2 duplex is MURATA for EC21-A R2.0, The Band2 duplex is pin to pin.
- 2、The MCP chip is FM6BD4G2GXA-1.8BLCGE2K for EC21-A R1.0, and NM1482KSLAXCL-3B for EC21-A R2.0.
- 3、Some reserved or unused resistors near power management unit were removed in R2.0 to improve power delivery network performance, and the corresponding layout (the part circled in yellow) is different.
- 4、The crystal oscillator supplier has been added. The crystal oscillators are pin to pin and share the same frequency.
- 5、The Main RF switch(U0801) supplier has been added. The Main RF switch is pin to pin.
- 6、The Diversity RF switch(U1101) supplier has been added. The Diversity RF switch is pin to pin.
- 7、The GNSS SAW(U1104) supplier has been added. The GNSS SAW is pin to pin. besides, The GNSS circuit added two component in R2.0 to improve power GNSS performance, and the corresponding layout (the part circled in white) is different.



EC21-A R1.0

EC21-A R2.0

Main component's Difference Table

Designator	EC21-A R1.0 (Part Description)	EC21-A R2.0 (Part Description)
U0901	IC RF DPX UMTS/LTE UNBalance B2 1.8x1.4mm H0.6mm RO	IC RF DPX UMTS/LTE UNBalance B2 1.8x1.4mm H0.6mm RO
U0103	MERO MCP 4Gbx8 NAND 2Gbx32 DDR2 1.8V 533MHz 162-FBGA 8x10.5mm H1.0mm RO	MERO MCP 4Gbx8 NAND 2Gbx32 LPDDR2 1.8V 533MHz PDID=W 162-FBGA 8x10.5mm H1.0mm RO
U1104	IC RF RX filter GPS/GLONASS/Campass Unbalance 28dBm 1.1x0.9mm H0.45mm RO	IC RF RX filter Beidou/GPS/GLONASS Unbalance 1.1mmx0.9mm H0.55mm RO
U0801	IC RF SWITCH SP6T 39dBm 2.0x2.0mm H0.6mm RO	IC RF SWITCH SP8T 40dBm 2.0x2.0mm H0.6mm RO
U1101	IC RF SWITCH SP6T 39dBm 2.0x2.0mm H0.6mm RO	IC RF SWITCH SP8T 34dBm 2.0x2.0mm H0.55mm RO

Sincerely,



Name: Jean Hu

Title: Certification Section