

# GSM HYBRID TECHNICAL DETAILS



- EC20 Mini PCIe adopts the standard PCI Express® MiniCard form factor (miniPCIe) and provides global network coverage on the connectivity of LTE. It delivers 50Mbps-up and 100Mbps-down data rates on LTE FDD networks and can also be fully backward compatible with existing UMTS and GSM/GPRS networks. It contains two variants EC20 Mini PCIe-A and EC20 Mini PCIe-E, which makes it backward-compatible with existing EDGE and GSM/ GPRS networks to ensure that it can connect even in remote areas devoid of 4G or 3G coverage.

## Frequency Bands

### EC20-E Mini PCIe

FDD LTE: B1/B3/B5/B7/B8/B20

UMTS: B1/B5/B8

GSM: 850/900/1800/1900MHz

GSM band	$f$ (MHz)	Uplink (MHz) (Mobile to Base)	Downlink (MHz) (Base to Mobile)	Channel number	Equivalent LTE band
GSM-850	850	824.2 – 849.2	869.2 – 893.8	128 – 251	5
E-GSM-900	900	880.0 – 915.0	925.0 – 960.0	975 – 1023, 0 - 124	8
DCS-1800	1800	1710.2 – 1784.8	1805.2 – 1879.8	512 – 885	3
PCS-1900	1900	1850.2 – 1909.8	1930.2 – 1989.8	512 – 810	2

- bands 2 and 5 (shaded in blue) have been deployed in NAR and CALA (North American Region [Canada and the US], Caribbean and Latin America)
- bands 3 and 8 (shaded in yellow) have been deployed in EMEA and APAC (Europe, the Middle East and Africa, Asia-Pacific)
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