

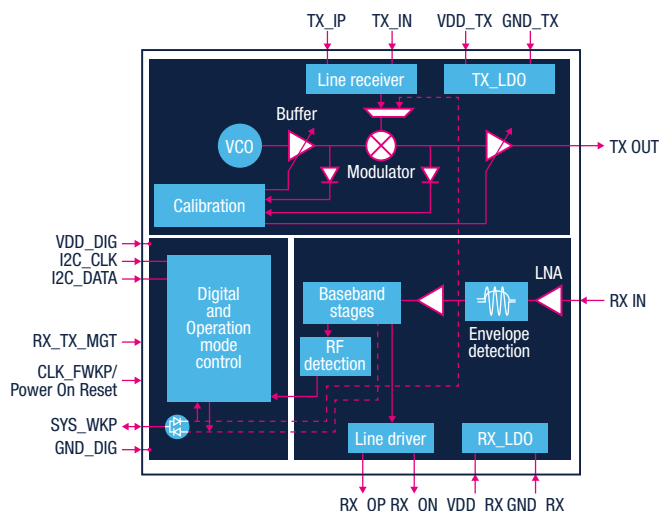
ST60

60 GHz contactless connectivity



High speed, low power, short range, point to point 60G Hz RF Link, replaces cables & connectors unleashing innovative product design

ST60 is designed to provide the best performance at the lowest possible power in order to remove cables/connectors in multiple applications.



Fully integrated 60 GHz V-band transceiver:

- transmit and receive paths
- power management with single or dual supply
- configuration through I²C bus or hardware control pins

Point-to-point wireless link

- Single-ended CMOS IO for up to 100 Mbps
- Differential analog SLVS TX/RX port for up to 6.25 Gbps
- Operate in half-duplex mode with ASK modulation

Very low power consumption

- 44 mW Tx, 27 mW Rx @ 5 Gbps
- 3.5 μ W in off mode

Very small form factor with optimized BOM

- VFBGA 2.2 mm x 2.2 mm x 0.8 mm, 25 balls, 0.4 mm pitch
- No need for external RF component nor external clock



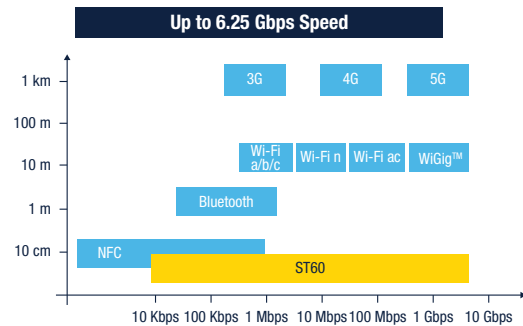
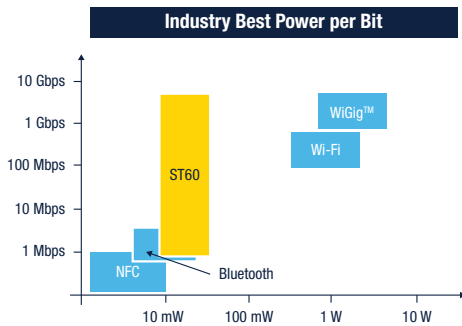
60 GHz contactless connectivity

- -40, +105° C
- BGA 2.2 x 2.2 mm²
- 44 mW Tx, 27 mW Rx



- Up to 6.25 Gbps contactless connectivity
- Industrial temperature range
- Flexible antenna configurations
- Cost optimized BoM & miniature footprint

ST60: Contactless 60 GHz connectivity offering extreme speed performance at very low power



ST60A2 operating modes

- Full/High Data Rate modes: FDR/HDR
 - SLVS differential input-output port (TX/RX)
 - Need DC balanced data 8 b/10 b coded
 - FDR mode: from 1 Mbps to 5 Gbps
 - HDR mode: from 500 Mbps to 6.25 Gbps
 - Typical interfaces:
 - LVDS (need level adaptation)
 - Ethernet SGMII
- Low Data Rate mode: LDR
 - Single-ended CMOS IO: from 10 kbps to 100 Mbps
 - Typical interfaces: UART, GPIO



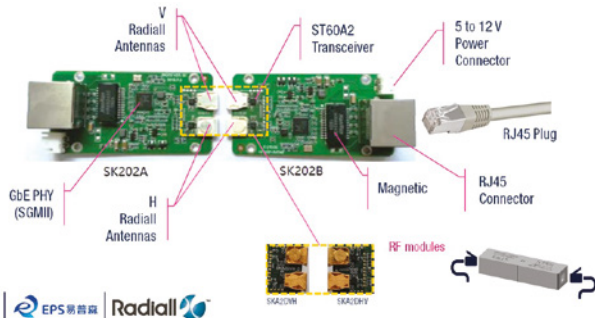
Contactless Gigabit Ethernet Bridge (SLVS/HDR)



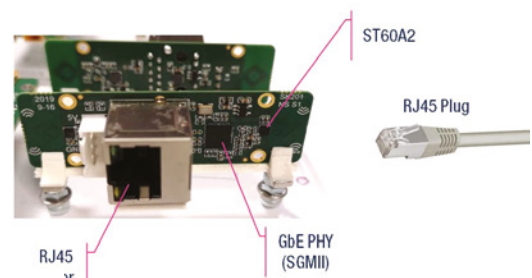
Contactless Full Duplex UART (GPIO/LDR)

ST60A2 contactless Ethernet offering

Gigabit Ethernet module - Horn Antennas



Gigabit Ethernet module - Patch Antennas



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