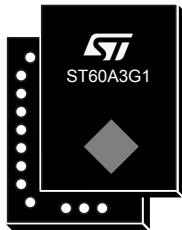


## 60 GHz V-band contactless connectivity transceiver with integrated antenna and tunneling eUSB2, UART, GPIO or I<sup>2</sup>C



VFBGA23 AIP

### Features

- 60 GHz V-Band transceiver for short range contactless connectivity up to 480 Mbit/s
- Compact solution integrating full RF transceiver and antenna, operating in half-duplex mode
- 44 dB typical total link budget, up to 6 cm free-space propagation loss
- eUSB2, UART, GPIO or I<sup>2</sup>C RF tunneling
- Single 1.8 V supply
- Low power consumption (typical values):
  - eUSB2 Rx/Tx - 110/130 mW
  - UART/GPIO/I<sup>2</sup>C - 90 mW
  - Standby - 13  $\mu$ W
- Optimized BOM without external matching network and clock references. A reference clock may be used at one end of the RF link to comply with specific regional regulation
- Package: VFBGA 2.9 mm x 4.1 mm x 0.8 mm, 23 balls, 0.4 mm pitch

#### Product status link

[ST60A3G1](#)

### Description

The ST60A3G1 is an RF millimeter-wave transceiver product, with integrated antenna, operating in the 60 GHz V-band. The ST60A3G1 has a miniature form factor, optimized bill of materials and low power operation. The ST60A3G1 is a high-speed RF transceiver compliant with eUSB2, UART and I<sup>2</sup>C protocols. The transceiver module contains general purpose input/outputs (GPIOs) that are also available in tunneling mode. The ST60A3G1 meets the requirements of applications by virtue of its compactness, low-power operation, ease of use and its innovative architecture design for optimized system bill of materials.

### Applications

- Contactless test factory automation and after sales services
- Life proof hole-less personal devices
- Contactless accessories
- Contactless personal equipment docking hub and data transfer
- Industrial contactless connectors
- Board-to-board connection and flex cable replacement

## 1 Revision history

Table 1. Document revision history

Date	Revision	Changes
18-Feb-2022	1	Initial release.

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