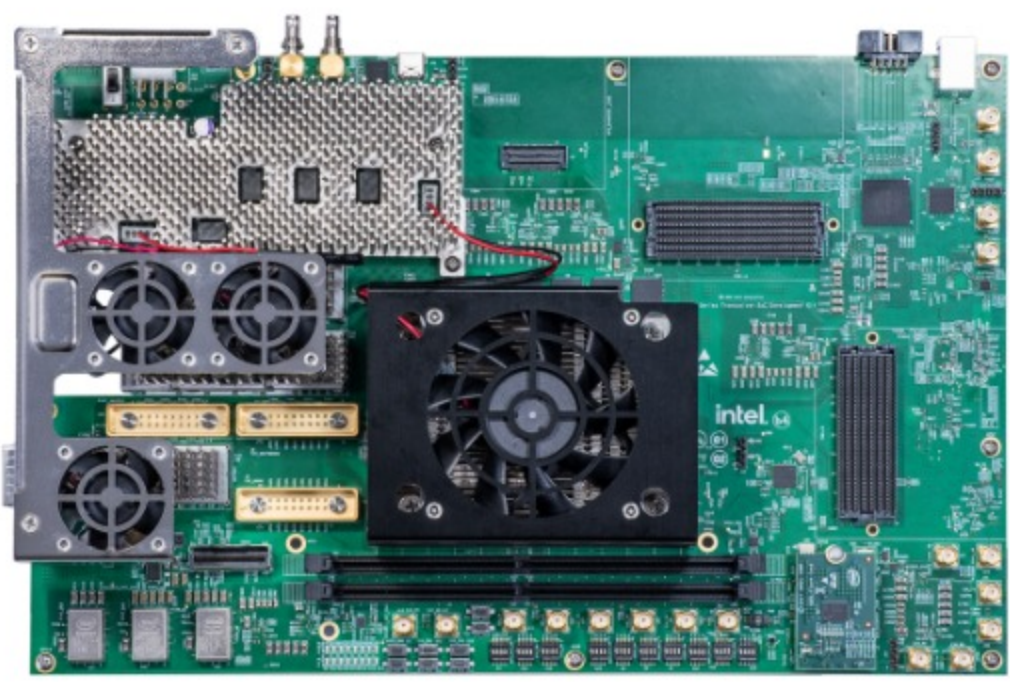


Feedback



You can use this development kit to:

- Evaluate Agilex™ 7 FPGA I-Series SoC designs with the hard processor system (HPS).
- Evaluate F-Tile FGT and FHT transceiver performance.
- Generate and check pseudo-random binary sequence (PRBS) patterns.
- Dynamically change differential output voltage (VOD) pre-emphasis and equalization settings to optimize transceiver performance for your channel.
- Perform jitter analysis.
- Design for flexible protocol support in Video and Vision, JESD204C, SerialLite IV, CPRI, and other major standards.

Table 1. Ordering Information

Ordering Code	Check Distributor Availability	Agilex™ 7 FPGA I-Series Device
DK-SI-AGI027FC	Mouser	AGIB027R31B1E1VB

Table 2. Development Kit Contents and Features

What Is Included	
Board	Agilex™ 7 FPGA I-Series Transceiver-SoC Development Board mounted with Agilex™ 7 FPGA I-Series, 2700 KLE, 3184B package.
Device	AGIB027R31B1E1VB
Form Factor	Tabletop
Features and Connectors	Two FMC+ expansion connectors Transceiver interfaces include MXPM, MCIO, HD-BNC, 2xQSFP-DD and QSFP-DD800 Serial digital interface (SDI) channel
DDR Memory	On-board DDR4 memory (8GB) 2x DDR4 DIMMs sockets • Supports single channel, 72 bits, 2-DPC, DDR4/DDR-T module • 1x 16GB SR DDR4 DIMM (included in kit)
(QSFP) Cages	One quad small-form-factor pluggable (QSFP) cage
Cables and Adapters	USB 2.0 Type B cable Ethernet cable 240W power adapter and NA/EU/JP/UK cords ATX power convert cable - 24 pin to 6 pin
Software	A one-year license for the Quartus® Prime Pro Edition design software is included with the purchase of the kit. Refer to Intel® FPGA Software Installation and Licensing for more information.

Table 3. Documentation

Design Files	Content Description
User Guide	Documentation about setting up the development kit and using the included software (Quartus® Prime and installer package).
Installer Package DK-SI-AGI027FA (v24.1 or higher) DK-SI-AGI027FC (v24.2 or higher)	A single installation file containing: • User Guide - Contains the user guide. • Design Files - Contains schematics, and layout, Assembly, Bill of Materials. • Examples - Board Test System: BTS GUI, Power GUI and Clock GUI. • Examples - Golden Top project for pinout assignments management. • Examples - Design Examples: Memory, XCVR, GPIO and PCIe 4.0. Download and unzip the Design Files first, then install the Board Test System.
Board Schematic	DK-SI-AGI027FC DK-SI-AGI027FA DK-SI-AGI027FB and DK-SI-AGI027FES
Agilex™ 7 FPGA I-Series GSRD (Golden System Reference Design)	The Agilex™ 7 FPGA I-Series GSRD page on Rocketboards.org has instructions for getting started on hardware and software designs that utilize the HPS (hard processor system) on Agilex™ 7 FPGA I-Series. DK-SI-AGI027FB DK-SI-AGI027FA

Note:
Buyer represents that it is a product developer, software developer or system integrator and acknowledges that this product is an evaluation kit that is not FCC authorized, is made available solely for evaluation and software development and may not be resold.

Additional Resources

Find Boards

Find the right development board for your needs.

[Explore Boards](#)

Design Store

Altera® FPGA design examples provide efficient solutions for common design challenges. Visit the [Design Store for Altera® FPGAs and RocketBoards.org](#) to learn more.

Support Community

Find solutions, view comments and engage with other Intel® users around the world.

[Intel Support Community](#)