

RENESAS

PTK1062 PC-Based 60 GHz Evaluation Kit



60 GHz Evaluation Kit Overview

Compliant with the IEEE 802.11ad standard, the Evaluation Kit (EVK) is a ready-to-use, configurable 60 GHz radio, which provides up to 3.5 Gbps of throughput in both point-to-point (PtP) and point-to-multipoint (PtMP) topologies, allowing rapid and efficient evaluation of features and performances.

The EVK integrates Pharrowtech's PTM1060 Radio Frequency Module, the Renesas RapidWaveTM RWM6051 Modem Integrated Circuit and an Intel NUC Mini PC.

Software Development Kit

The EVK includes a software development kit (SDK) with a board support package (BSP) and a configuration tool.

Key Features

- · Standard: IEEE 802.11ad
- Frequency range: 57-71 GHz
- · Channel bandwidth: 540 MHz/1.08 GHz/2.16 GHz
- · Throughput: 3.5 Gbps
- · Modulation up to 64 QAM
- · 32 TX and RX RF chains
- Antenna: 8x8 phased array antenna with electronic beamforming

Kit includes

- · Intel NUC Mini PC
- PTX1060 Radio Module including Pharrowtech PTM1060 RFM and Renesas RWM6051 Modem
- · Pre-installed firmware and SDK
- Documentation
- PCB Reference Design
- · Pharrowtech Radio Control Tool (PRCT) GUI
- · Custom Beambook Generator Tool
- · Tier1 Technical Support & Training

Applications and Markets

- · Wireless infrastructure: backhaul and access
- · Consumer: Wireless TVs and docking stations
- Industrial, scientific, and medical (ISM): Cable replacement
- · VR/AR: Wire-free GPU-assisted headsets
- · Smart Cities: High Resolution CCTV and public Wi-Fi
- · Military: Secure communications

Pharrowtech PTR1060 RF IC and PTM-1060 RF Module

Compliant with IEEE 802.11ad/ay and 3GPP (Rel. 17) ready, the Pharrowtech PTR1060 is the world's first fully integrated mmWave CMOS receiver and transmitter Radio Frequency Integrated Circuit (RFIC) that operates over the entire 57 - 71 GHz band.

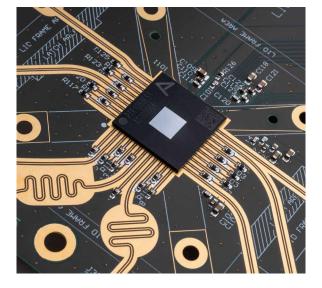
The PTM1060 combines the PTR1060 RFIC with an 8x8 phased array antenna. The chip delivers a unique combination of superior RF performance, low power consumption, low-cost structure and unique value-add features.

Renesas RapidWave™ RWM6051 modem IC

Compliant with IEEE 802.11ad, the Renesas RapidWaveTM RWM6051 modem IC is a millimeter wave (mmWave) multi-gigabit mixed signal wireless SoC solution.

The RWM6051 features a high degree of configurability with flexible channelization, adaptive MCS, and interference management schemes enabling next generation of self-organizing PtP, PtMP, and Mesh systems.

Ordering Information	Ordering Part Number	Shipping
	PTK1062	Вох



About Pharrowtech

Pharrowtech develops innovative wireless platforms to simplify and accelerate the adoption of millimeter-wave technology for mass-market applications. Our products include radiofrequency and digital semiconductors, phased array antennas, and software solutions.

Pharrowtech's leading products serve fast-growing markets including broadband fixed wireless access (FWA) and 5G, as well as high performance Wi-Fi platforms for consumer electronics, virtual reality (VR) headsets, and smart city IoT applications.

Contact us at **info@pharrowtech.com** for more information.



