APHARROWTECH

RENESAS

PTC1060 60 GHz PtMP/PtP Product



60 GHz PtMP/PtP Product

With 14 GHz of largely unutilized spectrum, the unlicensed 60 GHz band allows multi-gigabit data rates to enable high-capacity fixed access services to homes and businesses, infrastructure networks, smart cities and public Wi-Fi.

The PCT1060 is a cutting-edge 60 GHz solution, ready for outdoor deployments, that enables multi-gigabit connectivity at a fraction of the cost, and in a much shorter time than fiber infrastructure. Compliant with the IEEE 802.11ad standard, the PCT1060 provides user data rates up to 3.5 Gbps in both point-to-point (PtP) and point-to-multi-point (PtMP) topologies and features a wide-range beamforming antenna for ease of alignment.

The PCT1060 integrates the Pharrowtech's Radio Frequency Integrated Circuit (RFIC) combined with the beamforming antenna, the Renesas RapidWave™ RWM6051 Modem Integrated Circuit, and a Quad-core ARM A55 CPU with hardware packet acceleration.

The system features a Web UI for Operation, Administration & Maintenance, that can be customized to meet customers' specific needs.

Key Features

- Operating mode: PtMP & PtP
- · Standard: IEEE 802.11ad
- · Frequency range: 57-71 GHz
- · Channel bandwidth: 540 MHz/1.08 GHz/2.16 GHz
- · User data rate: 3.5 Gbps
- · Subscribers per sector: 30
- · Scheduler: TDMA
- · Duplex: TDD
- · Downlink/uplink split: Asymmetric
- Antenna: 8x8 phased-array antenna with electronic beam forming
- FoV Azimuth: ± 45°
- FoV Elevation: ± 30 °
- · QoS: 4 queues
- Interfaces:
 1 x 2.5 Gbps (Nbase-T) Eth with PoE in (48 V)
 1 x 1 Gbps (Nbase-T) Eth with PoE out (48 V)
 1 x DC Power In/Out (48 V)
- · OA&M: Web Interface
- NPU: Cortina/Realtek ARM-based quad-core A55 with hardware acceleration
- · Power consumption: 15 W
- · Mounting: Pole or wall
- · Dimensions HxWxD: 28 x 10 x 5 cm
- · Weight: 695 g

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.

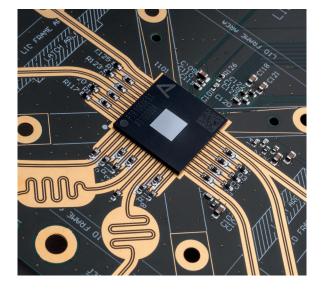
The PTM1060 combines the PTR1060 RFIC with an 8x8 phased array antenna. The chip delivers a unique combination of superior RF performances, low power consumption, low-cost structure and unique value-add features.

Renesas RapidWave™ RWM6051 modem IC

Compliant with IEEE 802.11ad, the Renesas RapidWave™ 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
	PTC1060	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 radio-frequency 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 WiFi platforms for consumer electronics, virtual reality (VR) headsets, and smart city IoT applications.

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



