

Qualcomm Dragonwing™

Wireless Broadband Development Platform



Comprehensive hardware and software development platform with robust interfaces designed to accelerate product development.

The Dragonwing Wireless Broadband Development Platform is designed for developers to accelerate product development with early access to supportive tools, reducing the time to market. This comprehensive platform includes the development board, software access, robust Qualcomm® tools, and documentation. It features the Qualcomm® X85 5G Modem-RF platform for leading wireless connectivity and integrated AI for unrivaled performance, efficiency, speeds, and spectrum flexibility.

The Dragonwing Wireless Broadband Development Platform is designed for applications across many segments, including mobile broadband, fixed wireless access, and 5G private networks. By applying feature innovation on top of the latest 5G and Wi-Fi, it is designed to enable fast, responsive, reliable, and high-quality connectivity for mobile and industrial routers. Robust WLAN cards and interface options make it an ideal fit for CPE development, and the software can easily be ported to the customer's final devices like routers, gateways, laptops, handhelds, drones, and more.

Related Products

The [Qualcomm® X85 5G Modem-RF](#) is a leading 5G platform, supporting integrated AI for unrivaled performance, efficiency, speeds, and spectrum flexibility.

The [Dragonwing FWA Gen 4 Elite Platform](#) is designed for the future of fixed wireless access, featuring the Qualcomm X85 5G Modem-RF for leading 5G performance.

Highlights

EARLIER AVAILABILITY

Development kit available now for select customers to enable parallel development, thereby reducing time to market.



COMPREHENSIVE DEVELOPMENT SUPPORT

Easily find resources and software to accelerate your design.



ROBUST INTERFACES

Designed to support a wide range of applications with robust interfaces, including USB-C, nano SIM, RJ45, SFP+, SDX85 LGA module with Sub-6 RF connectors, JTAG, DC power, SLIC interface, and a display connector.



UNPARALLELED PERFORMANCE

Brings the best of cellular and Wi-Fi, with integrated AI and advanced Modem-RF technologies.





Target Applications

The Dragonwing Wireless Broadband Development Platform enables consumer and enterprise wireless applications

- Fixed Wireless Access
- Broadband
- Routers and Gateways
- 5G Customer Premises Equipment
- Consumer Electronics

Features

- Qualcomm 5G AI Processor with dedicated tensor accelerator hardware optimized for 5G and 5G Advanced use cases with 30%* faster AI inference for better performance
- Qualcomm® AI-Powered Data Traffic Engine for better end user experience and performance
- AI-enhanced, dynamic gaming traffic prioritization
- Qualcomm® Advanced Modem-RF Software Suite—on-device, learning-based network selection
- 5G NR-based GNSS Location
- 6x CA with 400MHz bandwidth
- 1024 QAM Sub-6GHz support
- Supports all global 5G Sub-6 bands
- Switched uplink with Rel-17 (FDD/TDD)
- UL 4 Layer Carrier Aggregation (200MHz)
- 3GPP Release 18 support
- Qualcomm® RF Downlink Boost
- Qualcomm® 5G PowerSave
- USB-C/micro-B, nano SIM, micro-SD card, RJ45, SFP+, Sub-6 RF connectors, JTAG, LGA module socket, DC jack, display

* Compared to previous generation

Ordering Information

Product / Part Number

Dragonwing Wireless Broadband Development Platform / 65-49477-318

Specifications

Dragonwing Wireless Broadband Development Platform		
Cellular	Modem	Qualcomm X85 5G Modem-RF
	Technology	Sub-6 carrier aggregation (TDD-TDD, FDD-FDD, FDD-TDD), Sub-6GHz, 5G FDD, 5G TDD, 5G NR, Dynamic Spectrum Sharing (DSS), Sub-6GHz aggregation, SA (standalone), NSA (non-standalone), WCDMA (DB-DC-HSDPA), WCDMA (DC-HSUPA)
	Modem-RF Specs	400MHz bandwidth (Sub-6 GHz), 6 carriers, 4x4 MIMO (Sub-6)
	Features	1024-QAM Sub-6, 3GPP Release 17 and Release 18 support
Wi-Fi	Standards	Wi-Fi 7, Wi-Fi 6E, Wi-Fi 6 (802.11ax), 802.11ac wave 2
	Wi-Fi Spectral Standards	2.4GHz, 5GHz, 6GHz
	Spatial Streams	Up to 12
	Peak QAM	4k QAM
Artificial Intelligence	Development	Qualcomm AI Stack
	Technology	Qualcomm 5G AI Processor, Qualcomm® Hexagon™ NPU
	Features	Qualcomm® 5G AI Suite, Qualcomm® Networking AI Suite
Ethernet	Number of Ports	2
	Data Rate	10 Gbps and 2.5 Gbps
Software	Software Supported	Linux-based OpenWRT

To learn more visit: [qualcomm.com](https://www.qualcomm.com)

