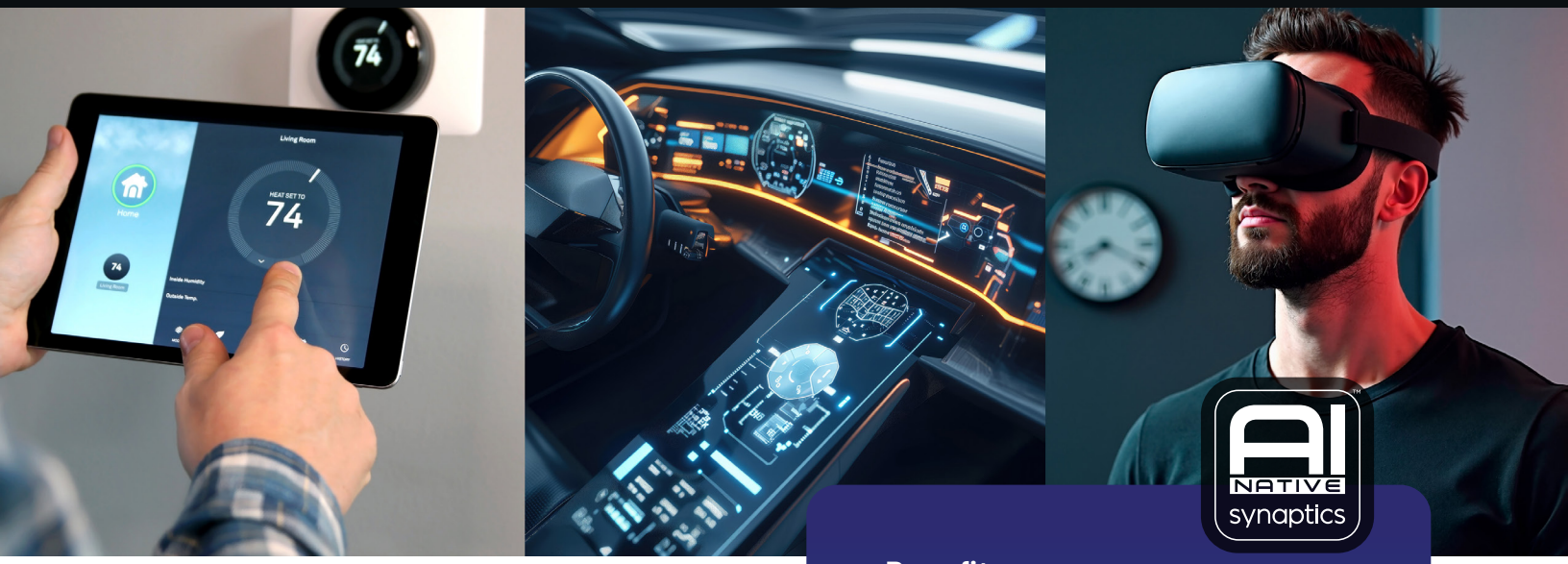
SYN4384 Triple Combo with Wi-Fi 7, Bluetooth/BLE, and IEEE 802.15.4 (Zigbee/Thread)

Product Brief



The Synaptics® SYN4384 is a highly integrated wireless SoC that brings next-generation connectivity to the Internet of Things (IoT). As part of the Veros™ wireless family, the SYN4384 delivers Wi-Fi 7, Bluetooth® 6.0, and IEEE 802.15.4 (Zigbee/Thread) connectivity in a cost- and power-optimized combo solution for edge devices. It supports 2×2 MIMO or 1x1 +1x1 multi-link operation (MLO) across the 2.4, 5, and 6 GHz bands, and is designed for applications requiring high throughput, low latency, and heterogeneous networking. Ideal for smart home hubs, AR/VR headsets, gaming, video conferencing, and automotive entertainment, the SYN4384 integrates tightly with the Synaptics Astra™ AI-Native compute platform for an enriched edge experience.

Benefits

- Tri-band Wi-Fi 7 with MLO delivers ultra-low latency and high reliability for real-time applications
- Triple-combo integration simplifies the design of Matter-compliant smart home and edge devices
- Optimized for IoT with low power, BOM integration, and host offload

Applications

- Home hubs and controllers
- Automotive infotainment
- VR/AR wireless headsets

- MULTI-PROTOCOL CONNECTIVITY WITH WI-FI 7, BLUETOOTH AND THREAD/ ZIGBEE WITH MATTER SUPPORT
- BUILT-IN SUPPORT FOR ASTRA AI-NATIVE PROCESSORS
- HIGH PERFORMANCE IOT
- LOW SYSTEM COMPLEXITY THROUGH EXTENSIVE BOM INTEGRATION

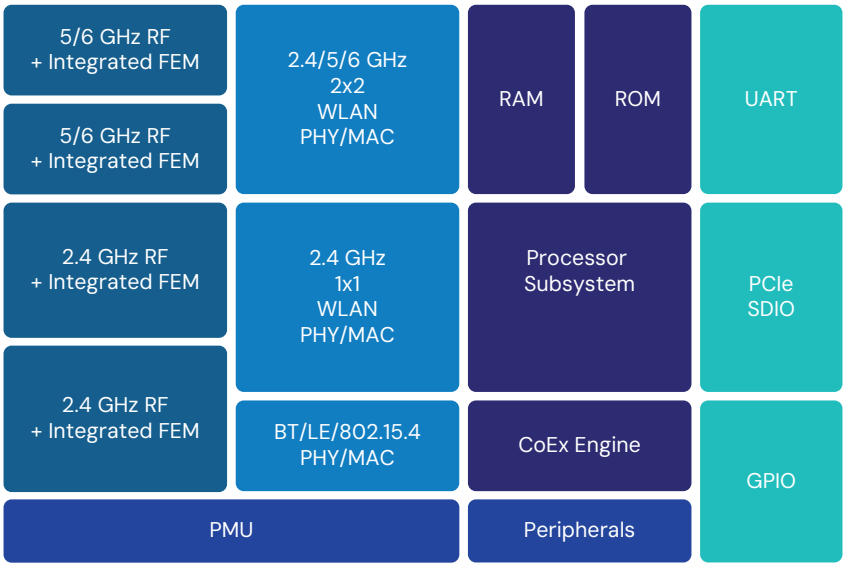
 | | PN: 190-000445-01

Features

- Tri-band Wi-Fi 7 (2.4/5/6 GHz) with 2x2 MIMO or 1x1 + 1x1
- Optimized for 80 MHz channel width, 1024-QAM, and Multi-Link Operation (MLO)
- Supports Bluetooth 6.0 with LE Audio and Channel Sounding distance measurement
- Zigbee/Thread-ready with IEEE 802.15.4 and Matter support
- Dual Arm® cores with on-chip memory enable low-power modes through host offloading
- PCIe and SDIO host interfaces and multiple peripheral I/Os
- Ultra-low power modes with integrated PMU
- Compact WLBGA 0.35 mm pitch package

Synaptics SYN4384

Triple Combo with Wi-Fi, Bluetooth/BLE, and IEEE 802.15.4 with extensive system BOM integration



System Block Diagram