AIRETOS
by VOXMICRO

- CONSULTATIVE DESIGN-IN   - PROACTIVE SUPPLY CHAIN   - GUARANTEED QUALITY OEM / ODM
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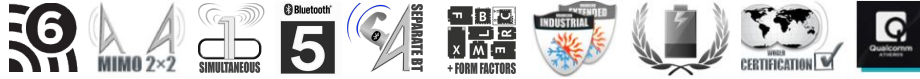
AIRETOS E63 CLASS

PCI EXPRESS® 63

Fully featured Wi-Fi 6 for the computing, enterprise and industrial markets

Dual Band Simultaneous (DBS) with dual MAC

Bluetooth 5.1 on a dedicated antenna with Class I mode, ANT+ and BLE

Choice of antenna connectors and form factors

Up to full Industrial range of operating temperatures

Modular Regulatory Certifications (FCC, ISED, CE, Japan)

PRE-APPROVED ANTENNA SERIES

WAPH	Internal, PCB Dipole	< 2.5db
WAFH	Internal, FPC Dipole	< 3db
WAMF	Internal, F-Type PIFA	< 3db
WAND	External, Omni	< 5db
WEAD	External, PCB Dipole	< 5db
WACI	Internal, SMT Chip	< 3db

* certified On-Demand
† list may vary by domain

TECHNICAL SUMMARY

Chipset	Qualcomm QCA6391, with IC-external FEMs (RF360)
Standard	IEEE 802.11ax/ac/abgn dual band simultaneous Wi-Fi combo with BT5.1
Data Transfer Rates	Up to 1775Mbps (dynamic)
Industrial Reference	Based on Qualcomm reference design (Hastings)
Communications Interface	WLAN via PCI Express Standard 2.1 host I/O + Bluetooth via UART PIN mapping
Antenna Type	Three on board connectors, two for Wi-Fi and a separate one for BT. Choice of U.Fl. or MHF4
RF Output Power, per chain	up to 21.5dBm
RF Output Power, combined	up to 24.5dBm
Industry Standards	Wi-Fi CERTIFIED Direct®, Wi-Fi CERTIFIED Miracast®
Power Consumption	TBD
Operating Temperature	UP TO -40 ~ +90 Celsius
Operating System	Windows, Linux, macOS, Android

COMMERCIAL SUMMARY

Year Released	2020	**Expected Lifespan**	2027+
Production Status	MP	**Effective Lead-time**	< 39 weeks
Samples Availability	On-Request	**Regulatory Support**	Tier 1

VARIANT MPNs	Chains	Grade	Form Factor	MPQ	SPQ	MRSP
ACB-QCA6391-NX1 / 4	2x2+1	Extended	(B) CoB, 2x2 + 1 for BT5, IPEX or MHF4 (Chip-on-Board)			$ 29.95
ACB-QCA6391-NI1 / 4	2x2+2	Industrial	(B) CoB, 2x2 + 1 for BT5, IPEX or MHF4 (Chip-on-Board)			$ 34.95
AFW-QCA6391-NX1 / 4	2x2+1	Extended	(W) E-key M.2 3030 (3032)			$ 34.95
AFW-QCA6391-NI1 / 4	2x2+1	Industrial	(W) E-key M.2 3030 (3032)			$ 39.95
AFF-QCA6391-NX1 / 4	2x2+1	Extended	(F) B-key M.2 3042			$ 34.95
AFF-QCA6391-NI1 / 4	2x2+1	Industrial	(F) B-key M.2 3042			$ 39.95
AEX-QCA6391-NX1 / 4	2x2+1	Extended	[X] Full-size miniPCIe			$ 34.95
AEX-QCA6391-NI1 / 4	2x2+1	Industrial	[X] Full-size miniPCIe			$ 39.95