seeed studio

INDUSTRIAL PRODUCT DATASHEET

FPC Antenna A-01 for Seeed Studio XIAO ESP32-C3/C5

A compact 2.4/5 GHz FPC antenna with an IPEX1 connector and 80 mm cable for XIAO ESP32-C3/C5 projects.

SKU	UPDATED	PRICE
318020748	2026-11-19 03:30:48	$0.50(Excl. VAT)



Overview



A compact 2.4/5 GHz FPC antenna with an IPEX1 connector and 80 mm cable for XIAO ESP32-C3/C5 projects. Use it as a replacement, spare, or for enclosure integration. XIAO ESP32-C3 operates at 2.4 GHz; XIAO ESP32-C5 supports 2.4 and 5 GHz. Antenna dimensions: 40 × 20 × 0.2 mm.

Key Features

01 **Dual-band antenna, board-specific operation**

Covers 2400–2500 MHz and 5100–5900 MHz. XIAO ESP32-C3 uses 2.4 GHz only; XIAO ESP32-C5 supports 2.4 and 5 GHz Wi-Fi. Replacing an antenna does not add frequency bands to a board.

02 **Measured RF characteristics**

Peak gain of 2.16 dBi at 2450 MHz and 2.80 dBi at 5420 MHz, with 50 Ω nominal impedance. Maximum measured efficiency is 71.49% at 2450 MHz; gain and efficiency vary with frequency and installation.

03 **Compact integration**

A 40 × 20 × 0.2 mm FPC radiator with an 80 mm, Ø1.13 mm cable and an IPEX1 connector for compact IoT enclosures.

04 **Replacement or spare**

Use for replacing a damaged antenna, keeping a project spare, or planning an enclosure layout. XIAO ESP32-C3 and XIAO ESP32-C5 already include an external antenna; this accessory is not a required extra purchase.

05 **Disconnect power before attaching the antenna. Align the IPEX1 plug directly over the matching board socket, then press gently straight down. Do not force an angled or mismatched connector.**

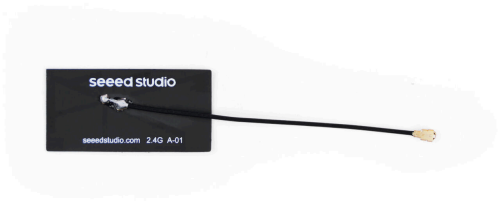
06 **Route the cable with gentle bends and provide slack at the connector. Do not pull on the cable or sharply crease the FPC radiator.**

07 **Keep the radiating section away from metal surfaces, batteries, and large ground planes where possible. Check signal strength in the final enclosure before fixing its position.**

08 **Choose a board**

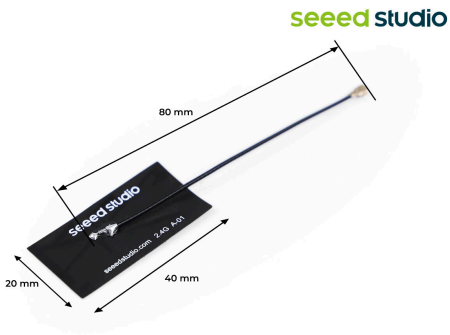
XIAO ESP32-C5 — 2.4/5 GHz Wi-Fi; XIAO ESP32-C3 — 2.4 GHz Wi-Fi. Development boards are sold separately from this antenna.

Product Gallery

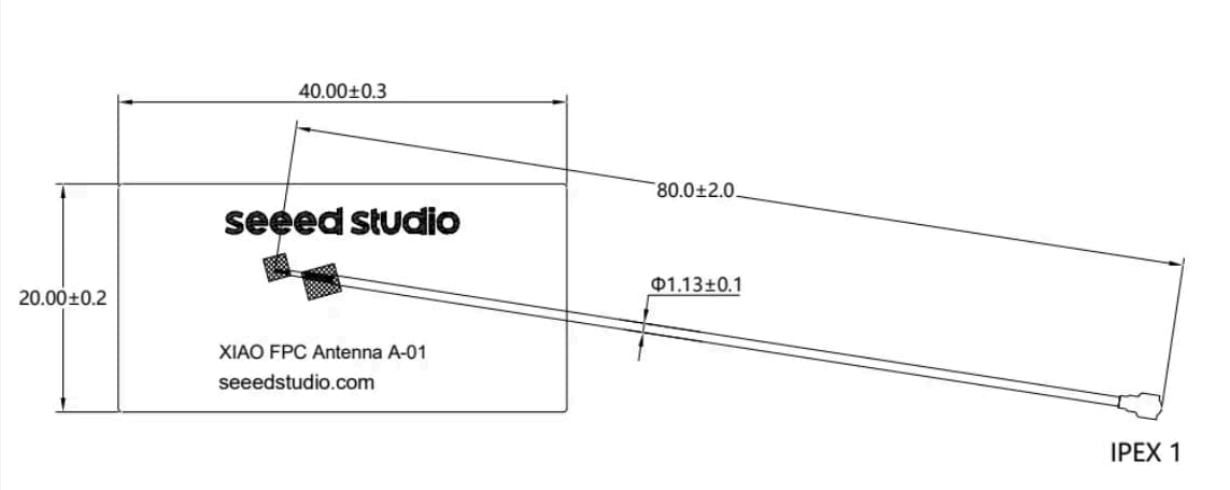








Hardware Overview



Applications

- **Industrial Sensor Networks**
- **Agricultural Telemetry Systems**
- **Drone Swarm Relays**
- **Embedded IoT Gateways**

Resource Links

- https://www.seeedstudio.com/FPC-Antenna-A-01-for-XIAO-ESP32C3-C5-p-6439.html
- Datasheet

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