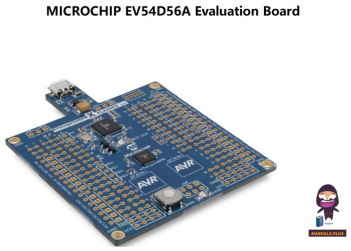
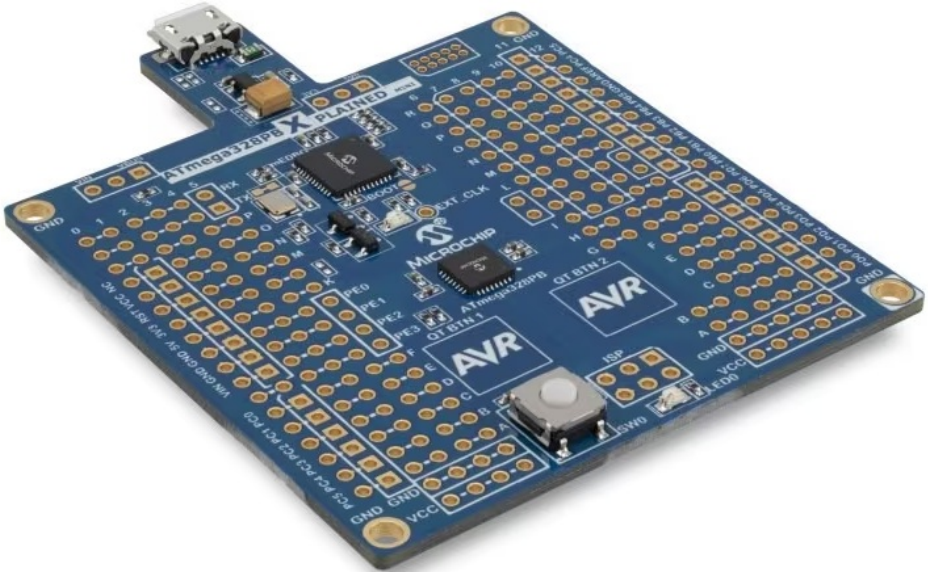


MICROCHIP EV54D56A Evaluation Board Owner's Manual

Contents

MICROCHIP EV54D56A Evaluation Board



Product Information

- **Specifications**
  - **Model:** EV54D56A (ATA5835-XPRO)
  - **Manufacturer:** Linx Technologies Inc.
  - **Antenna Part Number:** ANT-433-CW-RH-SMA
  - **Antenna Type:** Whip
  - **Regulatory Approvals:** FCC CFR47 Part 15 Subpart C, ISED RSS210

Product Usage Instructions

- **Usage Instructions**
  - Refer to the user manual for detailed instructions on operating the EV54D56A device.
- **Antenna Considerations**
  - The approved antenna for use with this device is the ANT-433-CW-RH-SMA manufactured by Linx Technologies Inc. It is a whip antenna type.
- **Regulatory Approval**
  - **United States**
    - This device is approved for use in the United States under FCC CFR47 Part 15 Subpart C regulations.
    - Ensure compliance with FCC rules and guidelines for proper operation.
  - **Canada**
    - This device is approved for use in Canada under ISED RSS210 regulations.
    - Follow all relevant Canadian regulatory standards when using the device in Canada.

FAQs

- **Q: Can I use a different antenna with this device?**
  - **A:** To maintain compliance with regulatory standards, only the approved antenna type listed in the user manual should be used.
- **Q: What should I do if I encounter interference issues?**
  - **A:** If you experience interference, try reorienting or relocating the receiving antenna, increasing separation between equipment and receiver, connecting to a different circuit, or consulting a professional technician for assistance.

Usage Instructions

- This equipment (EV54D56A/ATA5835-XPRO) is an evaluation board and not a finished product.
- It is not directly marketed or sold to the general public through retail; it is only sold through authorized distributors or Microchip.
- Using this equipment requires significant engineering expertise towards understanding the tools and relevant technology, which can be expected only from a person who is professionally trained in the technology.
- The user must comply with all the instructions provided by the Grantee, which indicate installation and/or operating conditions necessary for compliance.

Antenna Considerations

The following table provides details about the approved antenna.

Part Number	Manufacturer	Antenna type
ANT-433-CW-RH-SMA	Linx Technologies Inc.	Whip

Regulatory Approval

This equipment has received regulatory approval for the following countries:

- United States/FCC ID: 2ADHK54D56
- Canada/ISED:
  - **IC ID:** 20266-54D56
  - **HVIN:** EV54D56A
- European Union/CE

United States

This equipment has been approved for use in the United States under Federal Communications Commission (FCC) CFR47 Telecommunications, Part 15 Subpart C “Intentional Radiators”.

FCC

Labeling and User Information

The FCC ID label has been permanently affixed to equipment on the bottom silkscreen layer of the board and is visible, as well as, legible to the user. Due to the size of the equipment, the following compliance statements are included in the user manual: This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, under part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used by the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and the human body.

FCC NOTICE: This kit is designed to allow:

1. Product developers evaluate electronic components, circuitry, or software associated with the kit to determine whether to incorporate such items in a finished product and
2. Software developers to write software applications for use with the end product. This kit is not a finished product and when assembled may not be resold or otherwise marketed unless all required FCC equipment authorizations are first obtained. Operation is subject to the condition that this product does not cause harmful interference to licensed radio stations and that this product accepts harmful interference. Unless the assembled kit is designed to operate under part 15, part 18 or part 95 of this chapter, the operator of the kit must operate under the authority of an FCC license holder or must secure an experimental authorization under part 5 of this chapter.

The kit is labelled with the following legend: For evaluation only; not FCC-approved for resale;

Approved Antenna Types

To maintain compliance in the United States, only the antenna type that has been tested shall be used. Testing of this equipment was performed with the antenna type listed in the Antenna Considerations section above.

Helpful Websites

- Federal Communications Commission (FCC): **https://www.fcc.gov/**.
- **FCC Office of Engineering and Technology (OET) Laboratory Division Knowledge Database (KDB): https://apps.fcc.gov/oetcf/kdb/index.cfm**.

Canada
This equipment has been approved for use in Canada under Innovation, Science and Economic Development Canada (ISED, formerly Industry Canada) Radio Standards Specification (RSS) RSS-210.
Labeling and User Information
The ISED ID label has been permanently affixed to the equipment on the bottom silkscreen layer of the board and is visible, as well as, legible to the user. Due to the size of the equipment, the following compliance statement is included in the user manual: This device contains licence-exempt transmitter(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

Operation is subject to the following two conditions:

1. this device may not cause interference,
2. this device must accept any interference, including interference that may cause undesired operation of the device.

Approved Antenna Types

To maintain compliance in Canada, only the antenna type that has been tested shall be used. Testing of this equipment was performed with the antenna type listed in the Antenna Considerations section above.

Helpful Websites

- **Industry Canada:** http://www.ic.gc.ca/.

European Union

- This equipment has been assessed for use in European Union (EU) countries European Telecommunications Standards Institute (ETSI) EN 300 220-1.

Labeling Information

- The CE mark has been permanently affixed to equipment on the bottom silkscreen layer of the board and is visible, as well as, legible to the user.

Approved Antenna Types

- To maintain compliance in the EU, only the antenna type that has been tested shall be used. Testing of this equipment was performed with the antenna type listed in the Antenna Considerations section above.

Simplified EU Declaration of Conformity

- Hereby, Microchip Technology Inc. declares that the radio equipment type EV54D56A complies with Directive 2014/53/EU.
- **The full text of the EU declaration of conformity for this product is available at** www.microchip.com/design-centers/wireless-connectivity/.

Helpful Websites

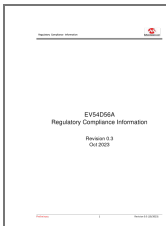
- A document that can be used as a starting point in understanding the use of Short-Range Devices (SRD) in the EU is the European Radio Communications Committee (ERC) Recommendation 70-03 E, which can be downloaded from the European Communications Committee (ECC) at: **https://docdb.cept.org/**.

Additional helpful websites are:

- **Radio Equipment Directive (2014/53/EU):** https://ec.europa.eu/growth/single-market/european-standards/harmonised-standards/red_en.
- **European Conference of Postal and Telecommunications Administrations (CEPT):** http://www.cept.org.
- **European Telecommunications Standards Institute (ETSI):** http://www.etsi.org.
- **The Radio Equipment Directive Compliance Association (REDCA):** http://www.redca.eu/.
- **Revision** 0.3 (10/2023)
- **Revision** 0.3
- Oct 2023

This document contains the Regulatory Compliance information which will be part of the EV54D56A (ATA5835-XPRO) datasheet and related documents shared with customers.

Documents / Resources

	MICROCHIP EV54D56A Evaluation Board [pdf] Owner's Manual EV54D56A, ATA5835-XPRO, EV54D56A Evaluation Board, EV54D56A, Evaluation Board, Board

References

- CeptNew
- CeptNew
- ETSI - Welcome to the World of Standards!
- Language selection - Innovation, Science and Economic Development Canada Main Site / Sélection de la langue - Site principal d'Innovation, Sciences et Développement économique Canada
- Wireless Connectivity Products | Microchip Technology
- REDCA Home
- OET Knowledge Database (KDB)
- ECO Documentation
- User Manual