User's Guide

AM62L Power Visualizer

ABSTRACT

The AM62L Power Visualizer allows for users to measure real time power consumption of the processor on TMDS62LEVM including while the SoC is in a low power state. The tool can be accessed here. The AM62L Power Visualizer can run on any PC operating system and is recommended to run in Chrome® for best performance.

Table of Contents

Trademarks

1 Overview

1.1 Where to Find the AM62L Power Visualizer

There are 3 places to find the AM62L Power Visualizer.

1. It can be directly accessed here.
2. Search 'AM62L Evaluation Module (TMDS62LEVM)' in dev.ti.com and select 'Visualize Power Consumption'.
3. Search 'AM62L Power Visualizer' in the TI Gallery.

1.2 Getting Started

Follow the AM62L EVM Quick Start Guide to flash an SD Card and boot Linux on the TMDS62LEVM.

Connect the TMDS62LEVM's XDS110 port, which is next to the UART port, to the PC running the AM62L Power Visualizer using a microUSB cable. Refer to the Hardware section of the AM62L EVM User Guide.

Once the AM62L Power Visualizer is open, the user will need to install the TI Cloud Agent Application if its the first time in use. The TI Cloud Agent will allow for seemless connection and proper function of the XDS110 on-board debugger. Follow the instructions in the pop-up window to install the TI Cloud Agent.

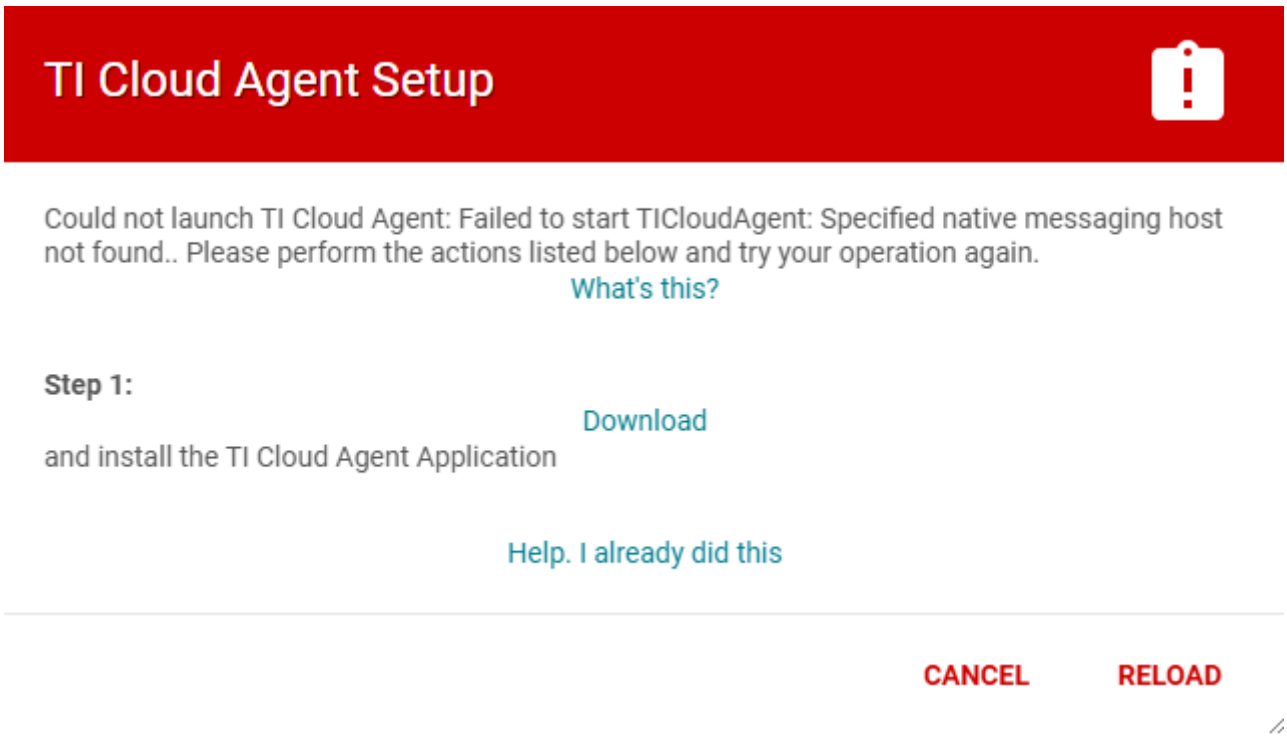

Figure 1-1. TI Cloud Agent Installation

The AM62L Power Visualizer utilizes the XDS110 Firmware and its COM port to collect power data from the SoC and displays it. Go to Options > Serial Port Settings to set the correct COM port, its usually second COM port for the XDS110. Confirm the hardware connection at the bottom of the tool.

The tool itself will have the most up-to-date getting started instructions.

1.3 Data Collection

Once the connection is established, the user can start collecting power data by navigating to the 'Data' tab. Use 'One-Time' for an instantaneous capture of the power data and use 'Stream' for a continuous readings that update every one second. Click 'Stream' again to stop the capture and review the .csv file generated with the data collected.

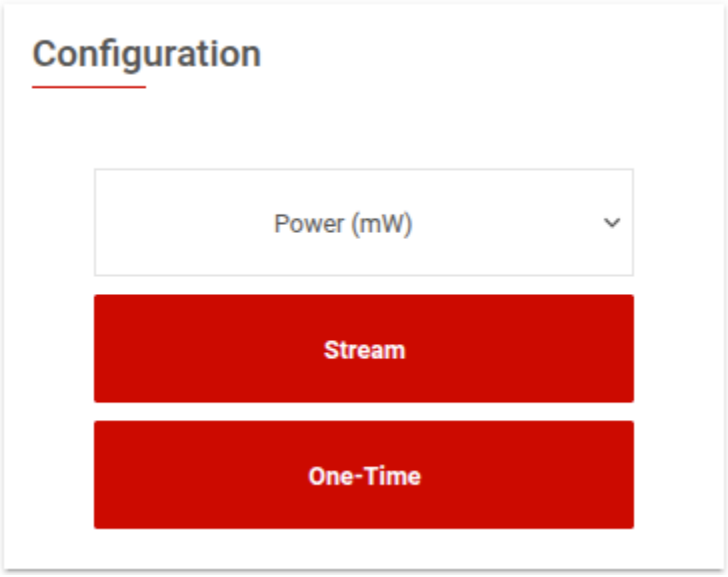

Figure 1-2. How to Start Data Capture

To visualize the data in a graph, navigate to the 'Plot' page where the 'One-Time' and 'Stream' buttons are also accessible to capture the power data. The title of the graph can be changed by clicking on it. The graph also shows all the possible power rails which can be selected/deselected to make the rail visible.

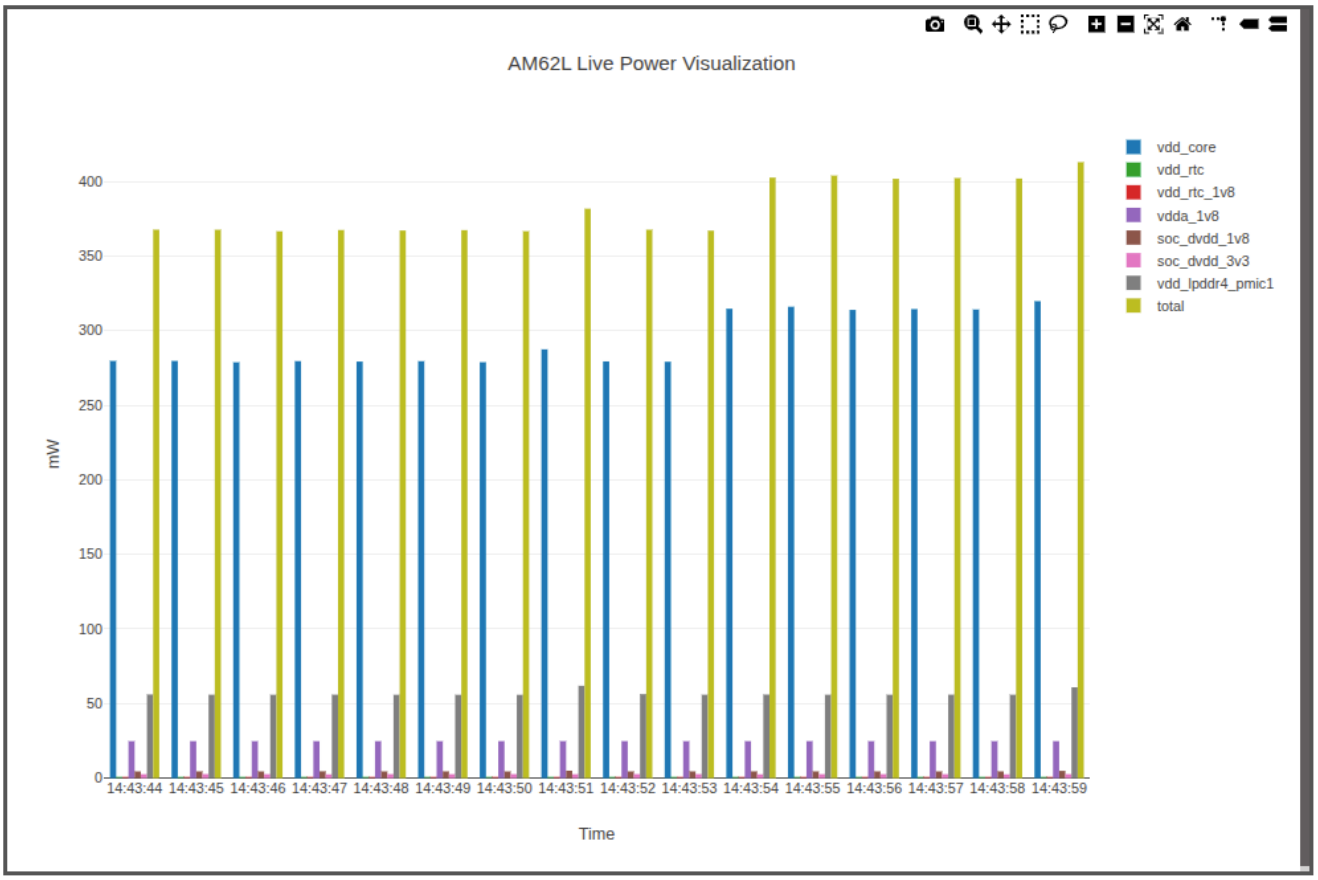

Figure 1-3. Live Graph of AM62L Power Consumption

Note

The AM62L Power Visualizer Tool's captured data outputs are provided as is and are not verified within a specified precision. It should not be used for power supply sizing.

2 Support Resources

TI E2E™ support forums are an engineer's go-to source for fast, verified answers and design help — straight from the experts. Search existing answers or ask your own question to get the quick design help you need.

Linked content is provided "AS IS" by the respective contributors. They do not constitute TI specifications and do not necessarily reflect TI's views; see TI's Terms of Use.

A References

1. AM62L Power Visualizer
2. AM62L Linux SDK Power Management Documentation
3. AM62L Product Page
4. AM62L Datasheet
5. AM62L Technical Reference Manual
6. AM62L EVM Page
7. AM62L EVM User's Guide
8. AM62L Power Consumption Summary

4 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

DATE	REVISION	NOTES
December 2025	*	Initial Release

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES “AS IS” AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, regulatory or other requirements.

These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you fully indemnify TI and its representatives against any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI’s products are provided subject to TI’s Terms of Sale, TI’s General Quality Guidelines, or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI’s provision of these resources does not expand or otherwise alter TI’s applicable warranties or warranty disclaimers for TI products. Unless TI explicitly designates a product as custom or customer-specified, TI products are standard, catalog, general purpose devices.

TI objects to and rejects any additional or different terms you may propose.

Last updated 10/2025