

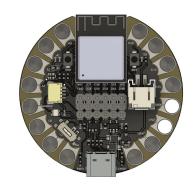
S3 development Board Product Brief

ESP32-S3 development board with 2.4GHz Wi-Fi and Bluetooth 5.0

Version: 1.0 Modified: 2025-04-30

Introduction

Unit Lily S3 is a compact development board powered by the versatile ESP32-S3 chip, engineered for IoT, AI, and machine learning applications. Its design integrates the efficient ESP32-S3 Mini microcontroller—with low power consumption and an optional PSRAM configuration—to support both basic sensor projects and advanced prototypes. Additionally, the 3.3V power rail facilitates seamless connectivity with low-voltage components such as LilyPad and QWIIC sensors.



Functional Description

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Electrical Characteristics

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Features

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Applications

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Settings

Interface Overview

Interface	Signals / Pins	Typical Use
-	-	-

Supported Pins

Symbol	I/O	Description
VCC	Input	Power supply (3.3V or 5V)

Pin & Connector Layout

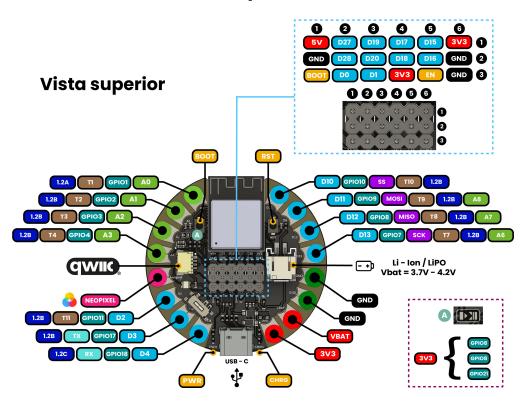
Group	Availables pins	Suggested use
GPIO	D2 to D13	Sensors, actuators
UART	Tx and Rx	Serial comunication
TouchPad	T1 to T11	Capacitive sensors for touch detection
Analogic	A0 to A8	12 bits (0–4095) resolution
SPI	Optional	Displays, aditional memory

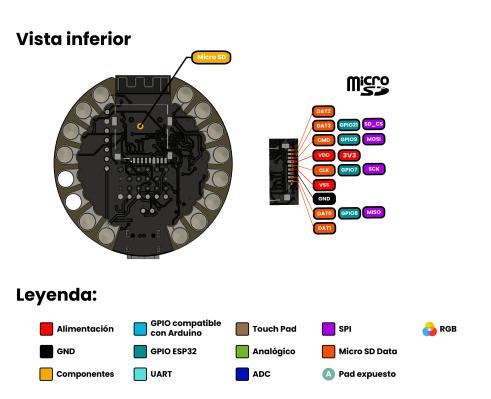
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Block Diagram

PINOUT UNIT LilyPad S3





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Dimensions						
	images/dimensions.png					

Usage

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