Daisy Field

Desktop Synth Reference Design for the Daisy Seed



Features:

Hardware Parameters:

- Control voltage interface patch-bay
- 4 CV ins
- 2 CV outs
- 1 gate in
- 1 gate out
- TRS MIDI input and output
- Headphone output with built in amplifier and a dedicated volume control
- ¼" line level inputs (x2) and outputs (x2)
- 8 knobs
- 2 buttons
- OLED screen for crisp display of visual feedback and data streaming
- LED push-button keyboard interface
- SD card slot for firmware updates, samples, configurable options, and more

- Daisy Seed onboard:
 - 96kHz / 24-bit audio hardware
 - 64MB of SDRAM for up to 10 minute long audio buffers
 - ARM Cortex-M7 MCU, running at 480MHz
 - 31 total GPIO pins with configurable functionality
 - 12-bit Digital to Analog Converters (x2)
 - SD card interfaces
 - PWM outputs
 - Serial Protocols for connecting external sensors and devices (SPI, UART, I2s, I2C)
 - Dedicated VIN pin for power
 - Micro USB port, and additional USB pins for full OTG-support as host and device

Applications:

DSP Eurorack module design and prototyping





Description

Create a mono-synth, drum machine, or MIDI sequencer with the Field! This desktop reference design for the Daisy Seed includes a wide array of hardware electromechanicals and interfaces commonly found in desktop synth and effects units.

Design complex instruments using the 8 onboard potentiometers, semi-modular patch bay, microSD card slot, and grid keybed. And with the ample visual feedback of 24 LEDs and an OLED screen, Field can turn into an impressive, complete machine all on its own.

It works as a great development tool, or handy small-form synth to take with you on the go. Comes with Daisy installed and 9V power adapter!

Ordering Information

To order the Daisy Field for volume purchases, tax exempt purchases, and the like, refer to table 1. For all other orders, see the product web page.

Order Code	Description	Target Board	Product Link
ES_Daisy_Field	Daisy Desktop Synth	Daisy Seed	<u>link</u>
	Reference Design		

Development Environment

System Requirements

- Windows® OS, Linux® 64-bit, or macOS®
- microUSB cable, Type-A
- 3.5mm headphones and/or 3.5mm audio jack to speakers

Toolchains & Recommended Development Software

- Daisy Toolchain
- VS Code

For additional reference documentation and both hardware and software examples for the Daisy Seed, head to the <u>Daisy support site</u>.

Tutorials

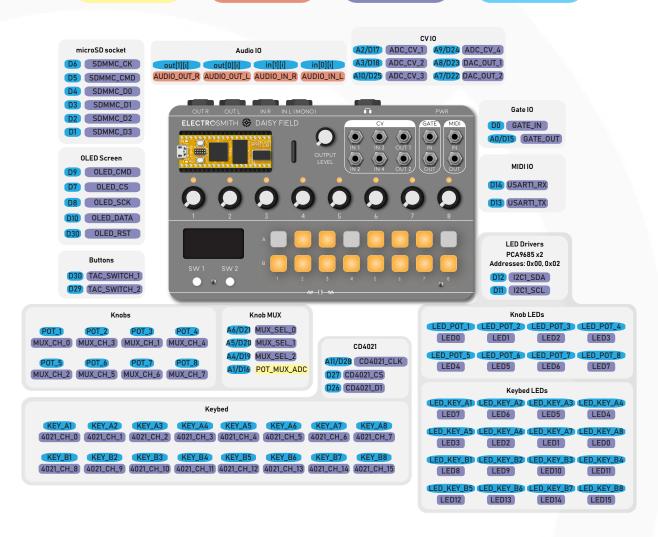
Get started with your Daisy Pod by following our guided programming tutorials.

- C++
- Arduino
- Oopsy



Field Pinout

ANALOG GPIO AUDIO IO PERIPHERAL GPIO DAISY PIN NAMES*



^{* &}quot;D" for Digital GPIO or "A" for Analog I/O, depending on use case.





Changelog

RELEASE	DATE	DESCRIPTION
v1.0	MAR/13/2025	Initial release





Colophon

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