SFP, OSFP, QSFP-DD Coding Module

Overview

The SFP / OSFP / QSFP-DD Coding Box is a universal programming and diagnostic tool designed for reading and writing EEPROM data on a wide range of optical and copper modules, including SFP/SFP+/SFP28, QSFP+/QSFP28/QSFP56, OSFP, and QSFP-DD transceiver and DAC assemblies.

Using the companion software, users can view complete module memory maps—such as vendor information, part number, serial number, wavelength, power levels, and custom fields—and modify EEPROM parameters based on application requirements or switch-vendor compatibility.

The device is powered through USB (up to 500 mA). For modules with power consumption above 1.5 W, an external 5V DC power supply is required to ensure stable programming and operation.



CB-1

Features & Benefits

- Supports full-module coding and EEPROM programming for **SFP / SFP+ / SFP28**, **QSFP+ / QSFP28 / QSFP56**, **QSFP-DD (400G/800G)**, and **OSFP (400G/800G)** modules.
- Intuitive **graphical user interface (GUI)** for viewing and editing module memory maps.
- Compact, lightweight design with a **durable engineering-grade plastic enclosure**.
- **USB Type-C** interface for high-reliability connectivity.
- Powered via **USB** or **external 5V DC** supply (required for modules >1.5 W).
- **Driver-free installation** — plug-and-play operation across supported systems.
- GUI software compatible with: macOS, Windows

Applications

- EEPROM read/write programming for the full range of pluggable module form factors, including:
  - SFP / SFP+ / SFP28,
  - QSFP+ / QSFP28 / QSFP56,
  - QSFP-DD (400G/800G),
  - OSFP (400G/800G).
- Module reconfiguration for vendor compatibility, DOM parameters, power class settings, wavelength/encoding attributes, and custom ID fields.

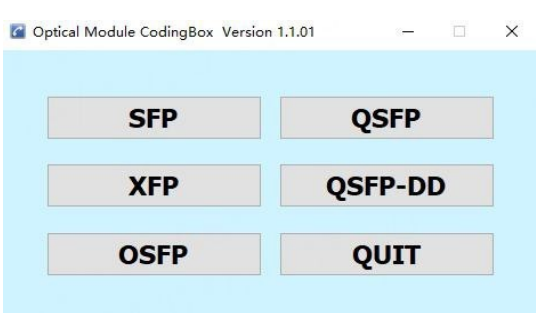
Absolute Maximum Ratings

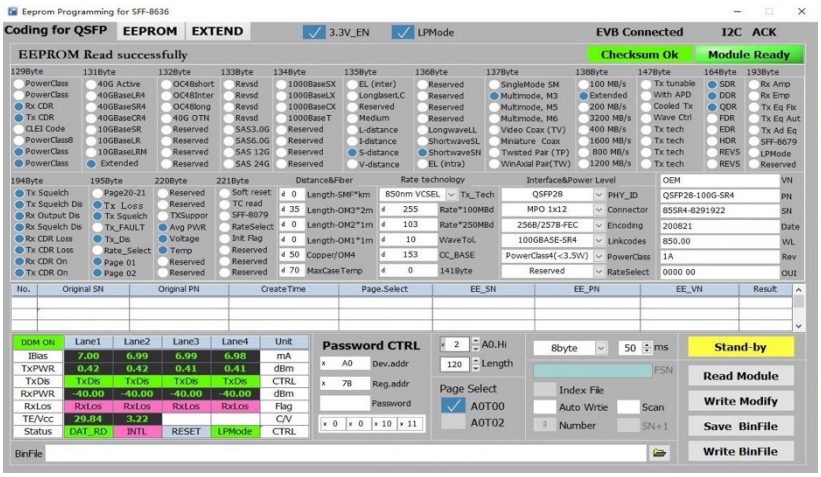
Parameter	Symbol	Min.	Max.	Unit
Power Supply Voltage	VCC	0	+6	V
Storage Temperature	TS	-10	+70	ºC

Absolute Maximum Ratings

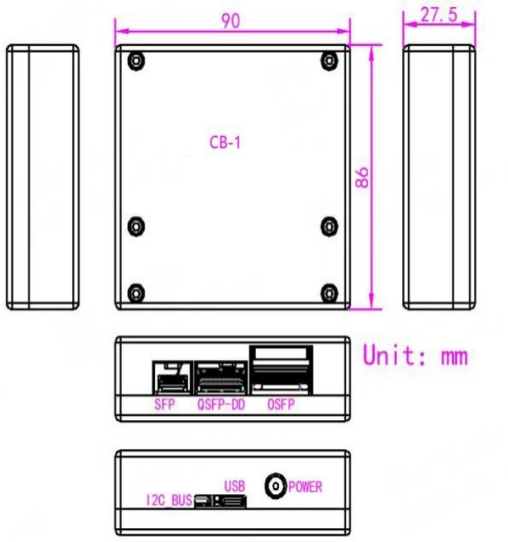
Parameter	Symbol	Min.	Typ.	Max.	Unit
Operating Temperature	Ts	0		+50	ºC
Power Supply Voltage	VCC	4.0	5.0	5.5	V
Physical Dimensions		90(L)x86(W)x27.5(H)			Mm
Net weight		180			G

Programming Software Menu





Hardware Configuration



- DC5V: DC Power
- USB: TYPE-Connected to pc and DC Power
- SFP: SFP Port, inserted SFP or SFP+ or SFP28 module
- OSFP: OSFP Port, inserted OSFP module
- QSFP-DD: QSFP-DD Port, inserted QSFP+ or QSFP28 or QSFP56 or QSFP-DD module
- I2C_BUS: I2C bus interface, Bridge external i2C bus
- LED: Vbus: USB 5V Power indicator,
    - Green: USB Power OK
    - OFF: USB not connected