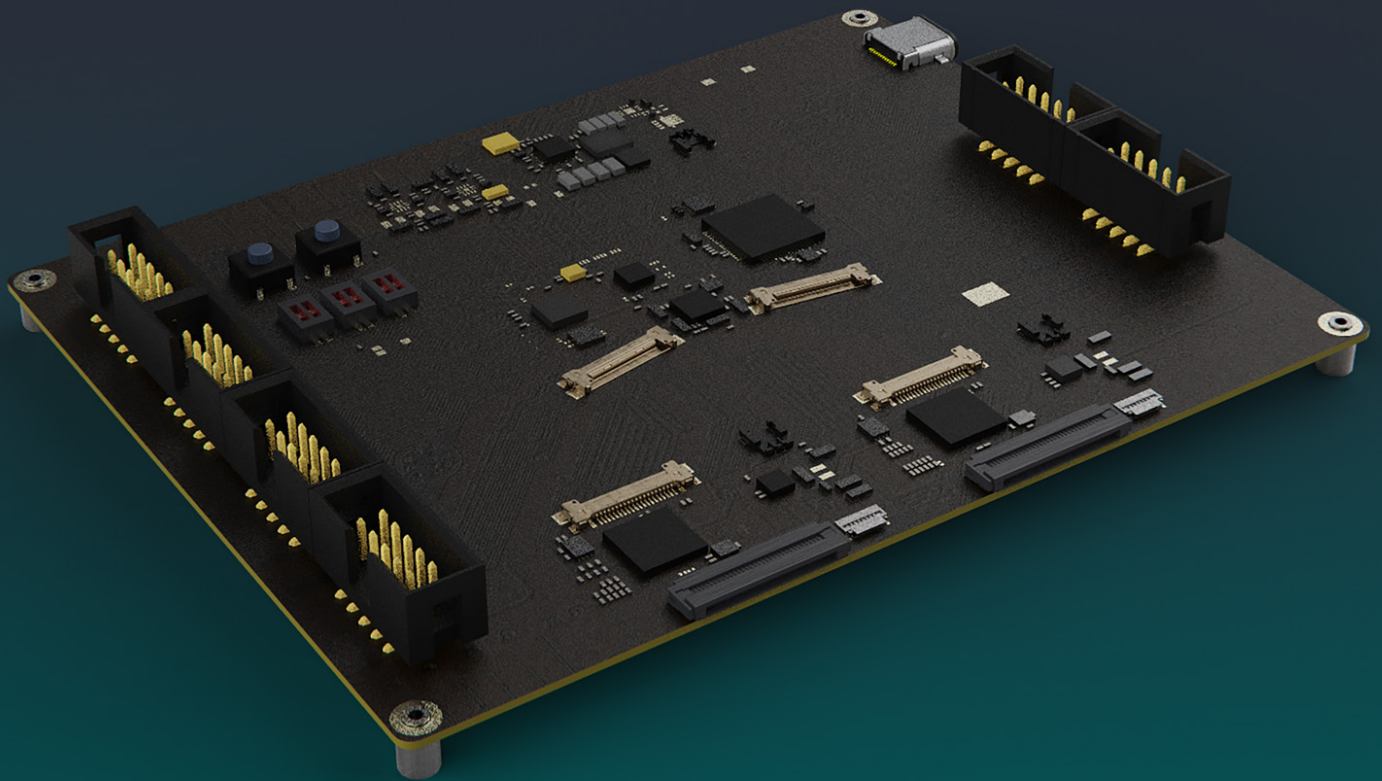


MARS EV1

AR Evaluation Kit

Built from the VX Modular Augmented Reality System



VX Inc.

Create - Test - Debug

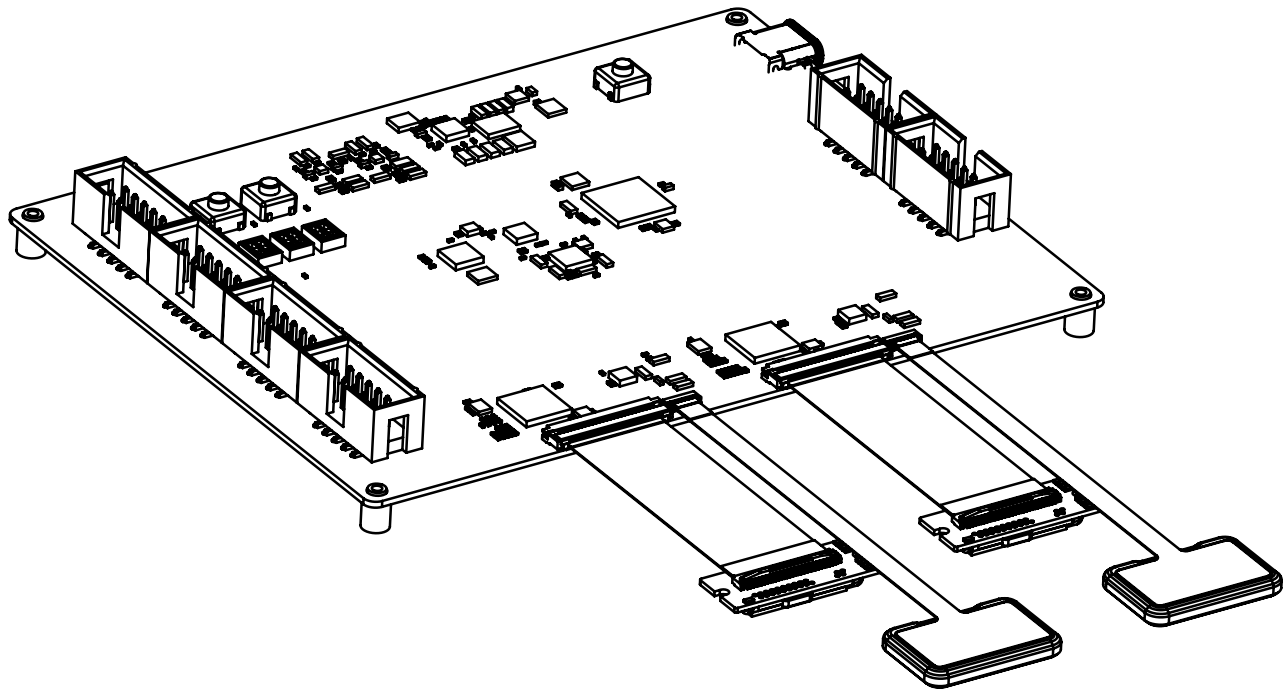
The Eval-Kit

The EV1 combines all the components of the MARS onto a single board and is a fully featured evaluation kit built to support VX customers in their product development.

The VX EV1-80001 Eval-Kit will work with any device that has a fully featured USB Type-C port. The CNED displays and sensors will enumerate automatically.

Full System Breakout

The kit includes all that is needed to evaluate sub-systems and validate functionality of the CNED, HBB Backlight, cameras and sensors. This kit can be used to program USB Billboard ID, DP-ALT mode, HMI functions, and HBB Backlight power optimization.



Modular Design

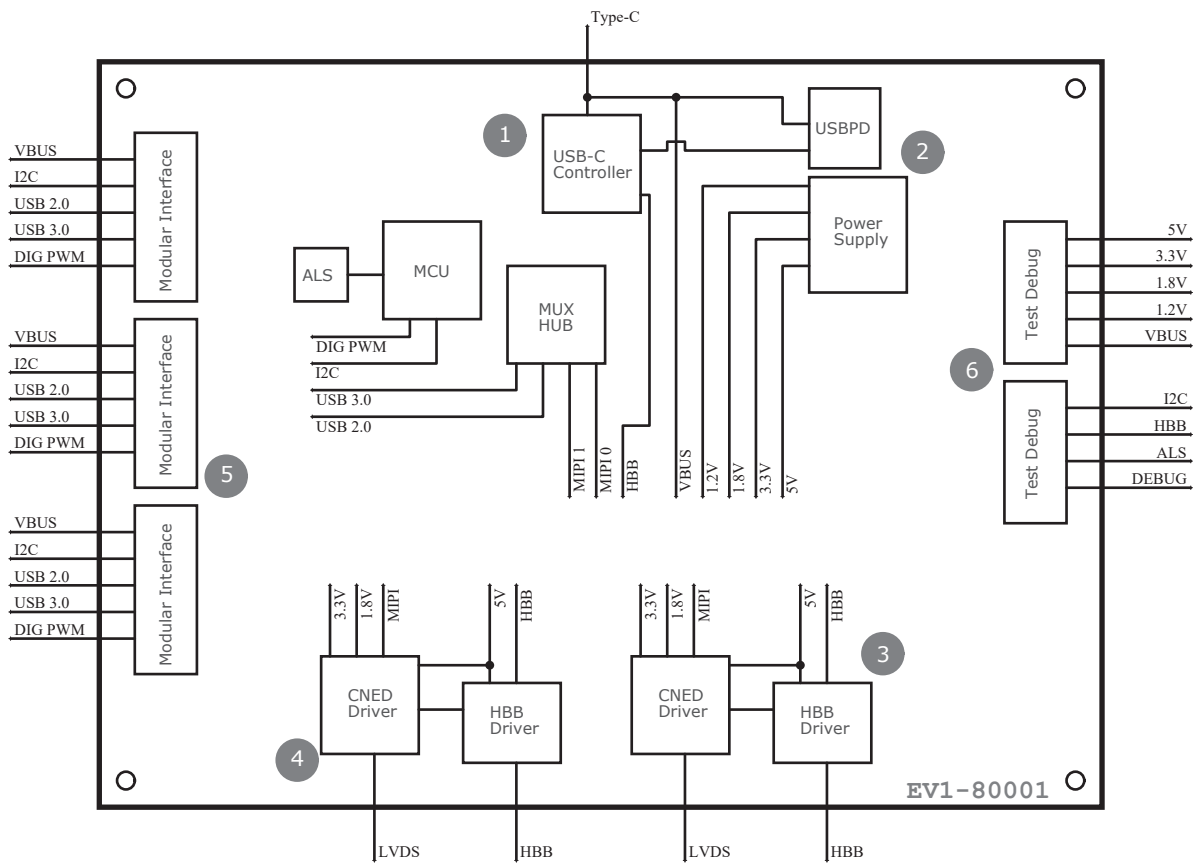
The EV1-80001 Evaluation kit is a single board that highlights the VX Modular Augmented Reality System (MARS) in a compact, ready to use setup. The Eval-Kit is a complete set of MARS boards in one with everything broken out. Developers can test and build everything needed for their system and applications.

What Is Included?

- EV1 Evaluation Board
- Two LCoS Microdisplays
- Two High-Brightness Backlights
- FPC Cables
- Interface Cables
- USB Type-C Cable

Optional Accessories

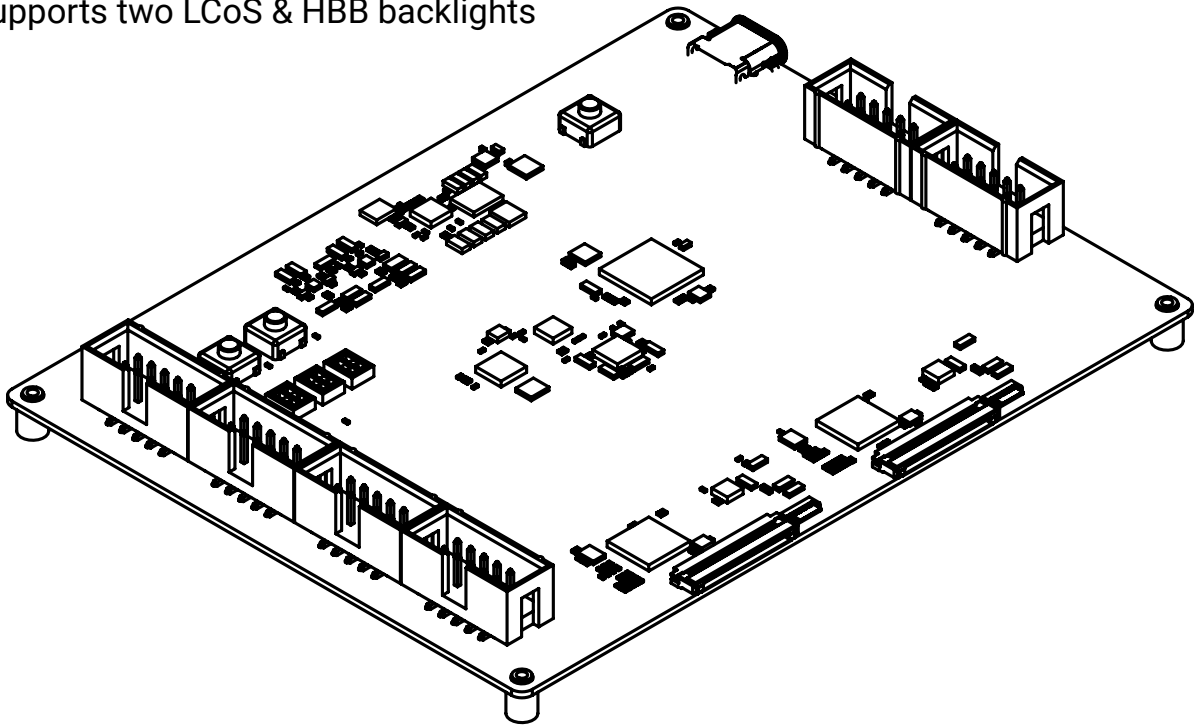
- TRI-50032 CNED AR Displays
- Modular Interface Breakout Boards



- ① Type-C input and signal control
- ② USB-C Power Delivery
- ③ Right Eye display driver and control
- ④ Left Eye display driver and control
- ⑤ IDC headers for Modules
- ⑥ IDC headers for High-brightness Backlights

VX BlueShift Features

- USB 3.1 Type-C DP-ALT Mode
- Auto Enumerate Plug-n-Play
- Supports Windows 10, Android, & Linux
- Onboard MCU for Data Processing
- Expandable Sensor Testing
- Supports two LCoS & HBB backlights



Feature	Description	Typical	Units
Resolution	CNED display resolution	1920 x 1080	px
Luminous Intensity	High-Brightness Backlight (HBB-50002)	3600	mcd
Type-C	USBPD 2.0 with ALT Mode	USB 3.1	-
DP-ALT	Displayport version support	1.2	-
Device Bandwidth	Maximum data rate for displays and modules combined	10	Gbit/s
Module Bandwidth	Maximum data rate for all modules combined	5	Gbit/s
Display Bandwidth	Maximum data rate for Displayport 1.2	8	Gbit/s



Augmented Reality
 Design
 Displays
 Integration