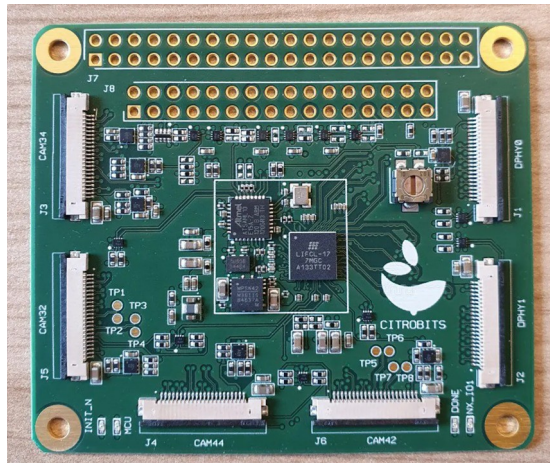# EVA-SHLD-ZERO   June 2022

Overview

Evaluation shield allows for easy connection to the popular Single Board Computers like Raspberry Pi Model B, allows to extend it capabilities offering a number of expandable Video Interfaces for Camera and Display.
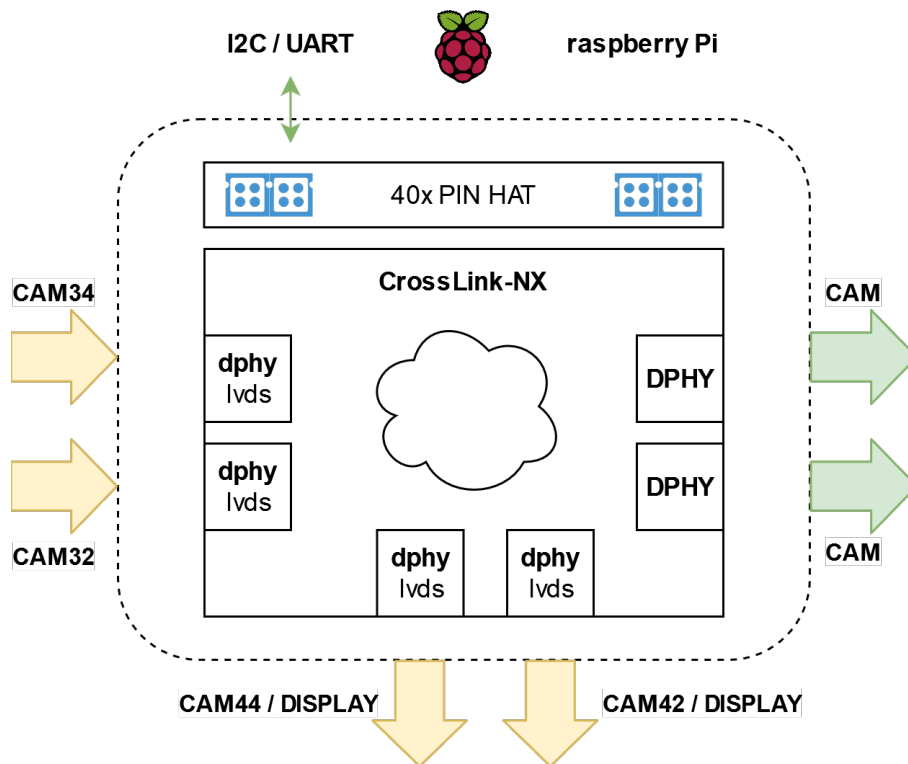
Highlights

- RaspberryPi HAT format
- Standard 22x Pin MIPI connector
- Up to 8x Camera/Display Interfaces
- Supported standards OpenLDI, CSI, DSI, LVDS, SLVS, Parallel
- Dual Bitstream boot
- Single Supply operation
- MCU for user-specific configuration

Specification

Form factor:	65 x 56 (mm) Raspberry Pi Model B compatible HAT
Connectivity:	22x Pin CSI - Raspberry Pi Zero pinout 6x Camera RX/TX Ports or 4x Display RX/TX Ports + 2x Camera Ports
Video:	2x 4-Lane Hard D-PHY CSI Ports (up to 2.5Gbps/Lane) 2x 4-Lane Soft D-PHY CSI/DSI Ports (up to 1.5Gbps/Lane) 2x 2-Lane Soft D-PHY CSI/DSI Ports (up to 1.5Gbps/Lane)
GPIO:	HAT-compatible 40-pin IO header
Power:	5V DC via GPIO header
Environment:	Operating temperature 0−60°C (-40…+85°C *)

*on request

Block Diagram

Applications

- Video Aggregation. Merge multiple video streams in a single CSI interface
- Video Interface Bridge. SLVS/LVDS to CSI, CSI to DSI, Parallel to CSI/DSI, etc...
- Video Cloning/Mirroring. Duplicate video content from input to multiple displays
- Video Pre-Processing(ISP). Image rotation, lens corrections, color space conversion, ...
- Video pattern generators for custom test equipment
- Video grabber from image sensor to USB, Ethernet, etc…

Targeted Platforms

- RaspberryPi
- NVIDIA Jetson