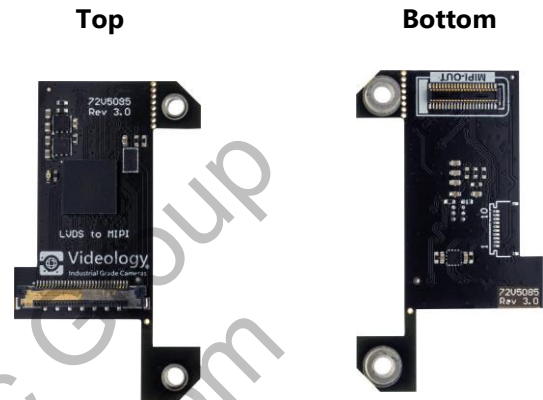


i.MX8M Plus Edge AI modular platform
Single/Double channel LVDS to MIPI interface board

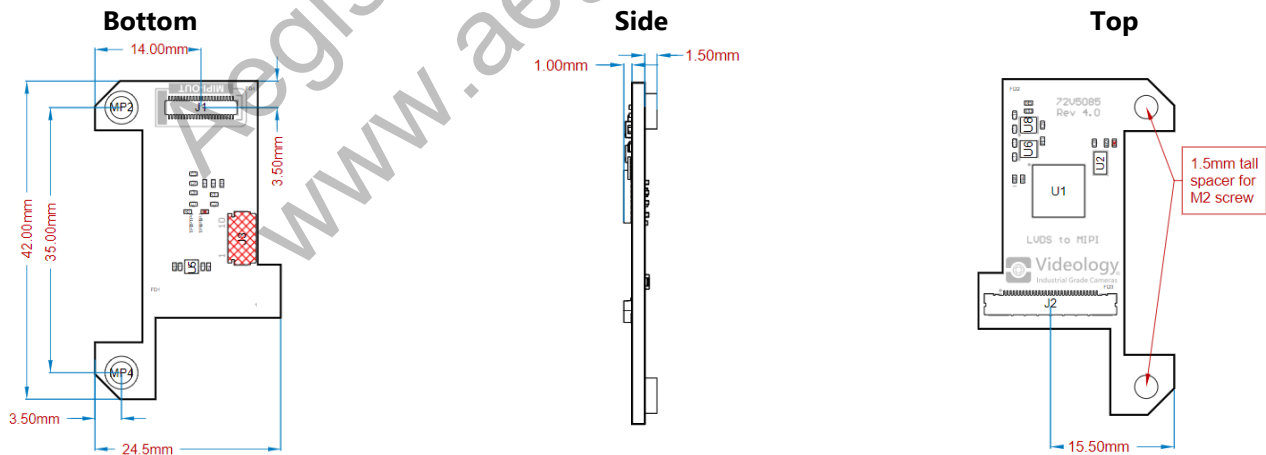
Product Features

- Supported resolutions*:
 - 720p@25/30
 - 720p@50/60
 - 1080p@25/30
 - 1080p@50/60
- KEL micro coaxial connect to block camera
- Firmware download via SCALX-SOM-AI
- Supported LVDS block cameras*:
 - Sony FCB* (not limited to):
 - FCB-EV7520A, FCB-EV9520L
 - Tamron* (not limited to):
 - MP1010M-VC, MP3010M-EV
 - Videology* (not limited to):
 - 24Z2.1W-10X/-20X/-30X/-40X/-55X
 - 25Z2.4W-36X Global Shutter

*: ask for availability or check list of supported cameras



Dimensions and Connectors



i.MX8M Plus Edge AI modular platform Single/Double channel LVDS to MIPI interface board

J1: MIPI-OUT (DF40C-40DP)

01	MIPI0_CLK_N	02	GND
03	MIPI0_CLK_P	04	CAM_FLASH (I)
05	GND	06	CAM_TRIG (O)
07	MIPI0_D0_N	08	GND
09	MIPI0_D0_P	10	CAM_NRESET (I)
11	GND	12	CAM_ALERT (O)
13	MIPI0_D1_N	14	GND
15	MIPI0_D1_P	16	CAM_PWR_EN
17	+5V_CAM ¹	18	+5V_CAM ¹
19	+12V_CAM ¹	20	+12V_CAM ¹
21	+12V_CAM ¹	22	+12V_CAM ¹
23	+5V_CAM ¹	24	+5V_CAM ¹
25	VCC_IO_CAM (O)	26	CAM_I2C_SCL
27	GND	28	CAM_I2C_SDA
29	MIPI0_D2_N	30	GND
31	MIPI0_D2_P	32	Reserved
33	GND	34	Reserved
35	MIPI0_D3_N	36	GND
37	MIPI0_D3_P	38	Reserved
39	GND	40	Reserved

¹: power in from SCAILX-SOM board

J2: KEL connector (USL00-30L-A)

01	RXIN3+	16	+12V OUT*
02	RXIN3-	17	+12V OUT*
03	RXCLKIN+	18	+12V OUT*
04	RXCLKIN-	19	GND
05	RXIN2+	20	GND
06	RXIN2-	21	RXIN7+
07	RXIN1+	22	RXIN7-
08	RXIN1-	23	RXIN6+
09	RXIN0+	24	RXIN6-
10	RXIN0-	25	Reserved
11	GND	26	Reserved
12	RXD (5V tolerant)	27	RXIN5+
13	TXD	28	RXIN5-
14	+12V OUT*	29	RXIN4+
15	+12V OUT*	30	RXIN4-

*: 9-12 V power out to the zoom block camera

LED indicator

RED	LED will light up at boot and will turn-off when FPGA code is successfully loaded by SCAILX-SOM board
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MIPI Mobile Industry Processor Interface

The LVDS-2-MIPI interface board supports single and dual LVDS channel conversion to MIPI CSI-2 for interfacing with the MIPI CSI-2 port on the SCAILX-SOM-AI module.

The FPGA firmware is automatically downloaded to the LVDS-2-MIPI board on SCAILX-SOM-AI boot.

Technical specifications

Electrical

Supply Voltage	9-12 V ± 0.75 V (via MIPI connector via SCAILX-SOM board)
Block camera power supply	9-12 V via KEL connector

Environmental

Operating Temp.	-40 °C ~ 60 °C (-40 °F ~ 140 °F)
Storage Temp.	-40 °C ~ 85 °C (-40 °F ~ 185 °F)
Operating Humidity	30% ~ 90% RH
Storage Humidity	<85% RH

Mechanical

Dimensions WxLxH	24.5x42x4.1 mm, PCB thickness 1.56 mm
Weight	2 g

Connectors

MIPI-OUT (J1)	DF40C-40DP-0.4V(51)
KEL (J2)	USL00-30L-A

Accessories (optional)

60C5011	KEL cable, pin 1-to-30, length 15 cm
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Part numbering

SCAILX-LVDS-2-MIPI	SCAILX-LVDS-2-MIPI Converter board LVDS to MIPI
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