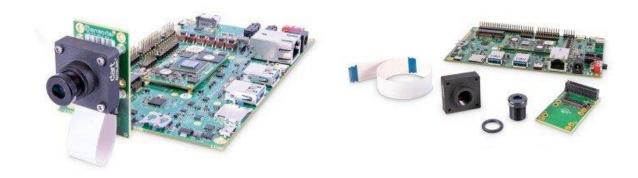


VARISCITE LTD.

VCAM-AR1335B Datasheet i.MX8 Camera Extension Board V 1.x



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VCAM-AR1335B Datasheet

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Revision History

Revision	Date	Notes
1.00	Feb 2020	Initial Release
1.01	Mar 2021	Added DART-MX8M-PLUS and VAR-SOM-MX8M-PLUS info
1.02	Jun 2021	Removed VCAM-AR1335B-SYM

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Compatible Products

PN	Compatible products
VCAM-AR1335B	DART-MX8M, DART-MX8M-MINI, DART-MX8M-PLUS

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VCAM-AR1335B – Embedded Vision Kits

Development kit with a Basler dart BCON for MIPI camera module and Linux support for NXP's i.MX8M, i.MX8M Mini and i.MX8M Plus SoC on a Variscite SoM.

This Basler dart BCON for MIPI Development Kit is a kit for integrating a Basler dart camera with a BCON for MIPI interface. It contains a dart camera module, a Variscite SoM with Linux drivers as well as additional accessories and thus offers a complete plug and play design-in package for dart BCON for MIPI camera modules.







General Information

Design-In Sample: January 2020

Components Included Camera model: daA4200-30mci (S-Mount)

Boards:

DART-MX8M / DART-MX8M-MINI

Basler BCON for MIPI to VAR M / M Mini/ M Plus Lens: Evetar Lens M13B0618W F1.8 f6mm 1/3"

Cables: FFC cable, 0.2m

daA4200-30mci (S-Mount)

Sensor Vendor	ON Semiconductor
Sensor	AR1335
Shutter	Rolling Shutter
Max. Image Circle	1/3"
Sensor Type	CMOS
Sensor Size	4.63 mm x 3.43 mm
Resolution (HxV)	4208 px x 3120 px
Resolution	13 MP
Pixel Size (H x V)	1.1 μm x 1.1 μm
Frame Rate	30 fps
Mono/Color	Color
Interface	BCON for MIPI
Pixel Bit Depth	10 bits
Synchronization	free-run
	software trigger
Exposure Control	programmable via the camera API automatic

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daA4200-30mci (S-Mount)

		manual
	Digital Input	2
	Digital Output	2
	Power Requirements	5V DC (via BCON for MIPI interface)
	Power Consumption (typical)	0.6 W
	Housing Type	Board Level
	Housing Size (L x W x H)	29 mm x 29 mm x 17.5 mm
	Lens Mount	S-mount
	Weight (typical)	5g
	Conformity	RoHS
	ŕ	CE
		FCC
		GenlCam
		MIPI CSI-2
		UL
DADT MAYOMA SAISII		KC
DART-MX8M-MINI	Accessory Type	Board
	Accessory Type Board type	Processing Board
	Size (L x W)	151 mm x 90 mm x 18 mm
	Processor Manufacturer	NXP
	SoC (system on chip)	NXP i.MX 8M, i.MX 8M Mini, i.MX 8M
	Soc (System on emp)	Plus
	Camera Interface	BCON for MIPI
	Ethernet Interface	10/100/1000 Ethernet
	Other Interfaces	Wi-Fi, Bluetooth, CSI-2, USB 2.0, USB 3.0, Mini PCIe
	SD Card Slot	μSD card
	Memory	2 GB
	Flash Memory	16 GB
	Power Requirements	5V DC
	Operating System	Linux
Basler BCON for MIPI to VAI	R M / M Mini	
	Accessory Type	Board
	Size (L x W)	55 mm x 31 mm x 12 mm
	Camera Interface	BCON for MIPI
	Additional Information	Single or dual camera support, depending on SoC
Evetar Lens M13B0618W F1	.8 f6mm 1/3"	
	Order Number	2000035178
	Accessory Type	Lenses

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Evetar Lens M13B0618W F1.8 f6mm 1/3"

Accessory Developer	Evetar
Focal Length	6.0 mm
Lens Mount	S-mount
Iris	F1.8
Iris Type	fixed
IR Cut Filter	yes
Max. Image Circle	1/3"
Working Distance	200 mm

FFC cable, 0.2m

Accessory Type	Data Cables
Accessory Developer	AXON' CABLE S.A.S.
Cable Length	0.2 m
Connector Camera Side	28 pin Hirose ZIF connector
Connector Host Side	28 pin Hirose ZIF connector
Interface	BCON for MIPI

daA4200-30mci (S-Mount) - Basler dart

The Basler daA4200-30mci (S-Mount) BCON for MIPI camera module with the ON Semiconductor AR1335 CMOS sensor delivers 30 frames per second at 13 MP resolution. This model comes with a S-mount.















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General Information

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Design-In Sample:	now	
Series Production:	February 2020	
Sensor		
	Sensor Vendor	ON Semiconductor
	Sensor	AR1335
	Shutter	Rolling Shutter
	Max. Image Circle	1/3"
	Sensor Type	CMOS
	Sensor Size	4.6 mm x 3.4 mm
	Resolution (HxV)	4208 px x 3120 px
	Resolution	13 MP
	Pixel Size (H x V)	1.1 μm x 1.1 μm
	Frame Rate	30 fps
	Mono/Color	Color
Camera Data		
	Interface	BCON for MIPI
	Pixel Bit Depth	10 bits
	Synchronization	free-run
		software trigger
	Image Processing	In-Camera Processing
	Exposure Control	programmable via the camera API automatic
	Digital Inquit	manual
	Digital Input	2
	Digital Output	2
	Power Requirements	5V DC (via BCON for MIPI interface)
	Power Consumption (typical)	0.6 W
Housing		
	Housing Type	Board Level
	Housing Size (L x W x H)	29 mm x 29 mm x 17.5 mm
	Lens Mount	S-mount
	Weight (typical)	5g
Conformity		
	Conformity	RoHS
		CE
		FCC
		GenlCam
		MIPI CSI-2
		UL
		KC

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