

VARISCITE LTD.

VCAM-AR0821B / VCAM-AR0821B-SYM Datasheet i.MX8 Camera Extension Board V 1.x





VARISCITE LTD.

VCAM-AR0821B Datasheet

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Revision History

Revision	Date	Notes
1.00	Jan 2021	

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Compatible Products

PN	Compatible products
VCAM-AR0821B	DART-MX8M-PLUS
VCAIVI-ANUOZID	Add on extension board for the VAR-DT8MCustomBoard
VCANA ADOGRAD CVNA	VAR-SOM-MX8M-PLUS
VCAM-AR0821B-SYM	Add on extension board for the Symphony-Board

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VCAM-AR0821B – Embedded Vision Kits

Development kit with a Basler dart BCON for MIPI camera module and Linux support for NXP's 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 2021

Components Included Camera model: daA3840-30mc (S-Mount)

Boards:

DART-MX8M-PLUS

Basler BCON for MIPI to VAR M / M Plus

Lens: Evetar Lens M13B0618W F1.8 f6mm 1/3"

Cables: FFC cable, 0.2m

daA3840-30mc (S-Mount)

Sensor Vendor	ON Semiconductor
Sensor	AR0821
Shutter	Rolling Shutter
Max. Image Circle	1/1.8"
Sensor Type	CMOS
Resolution (HxV)	3840 px x 2160 px
Resolution	8 MP
Pixel Size (H x V)	2.1 μm x 2.1 μm
Frame Rate	30 fps
Mono/Color	Color
Interface	BCON for MIPI
Pixel Bit Depth	20 bits
Synchronization	free-run
	software trigger
Exposure Control	programmable via the camera API automatic manual

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daA3840-30mc (S-Mount)

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) 15g Conformity RoHS CONFORMITY CO	daA3840-30mc (S-Mount)		
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Operating System Basler BCON for MIPI to VAR M PLUS Accessory Type Size (L x W) Camera Interface Additional Information Single or dual camera support, depending on SoC Evetar Lens M13B0618W F1.8 f6mm 1/3" Order Number Accessory Type Accessory Type Lenses Accessory Developer Evetar		Flash Memory	16 GB
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Evetar Lens M13B0618W F1.8 f6mm 1/3"

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

daA3840-30mci (S-Mount) - Basler dart

The Basler daA3840-30mci (S-Mount) BCON for MIPI camera module with the ON Semiconductor AR1335 CMOS sensor delivers 30 frames per second at 8 MP resolution. This model comes with a S-mount.













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General Information

Design-In Sample:	now	
Series Production:	December 2020	
Sensor		
	Sensor Vendor	ON Semiconductor
	Sensor	AR0821
	Shutter	Rolling Shutter
	Max. Image Circle	1/1.8"
	Sensor Type	CMOS
	Sensor Size	4.6 mm x 3.4 mm
	Resolution (HxV)	3840 px x 2160 px
	Resolution	8 MP
	Pixel Size (H x V)	2.1 μm x 2.1 μm
	Frame Rate	30 fps
	Mono/Color	Color
Camera Data		
	Interface	BCON for MIPI
	Pixel Bit Depth	20 bits
	Synchronization	free-run
		software trigger
	Image Processing	In-Camera Processing
	Exposure Control	programmable via the camera API
		automatic
		manual
	Digital Input	2
	Digital Output	2
	Power Requirements	5V DC (via BCON for MIPI interface)
	Power Consumption (typical)	0.6 W
lousing		
	Housing Type	Board Level
	Housing Size (L \times W \times H)	29 mm x 29 mm x 17.5 mm
	Lens Mount	S-mount
	Weight (typical)	15g
Conformity		
	Conformity	RoHS
		CE
		FCC
		GenlCam
		MIPI CSI-2
		UL
		EAC

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