



# Alvium GM2

Alvium GM2-2040

Alvium GM2-2040 innovative GMSL2 camera with Sony IMX541 CMOS global shutter sensor provides industrial performance for cost effective embedded applications.

## Allgemein

|              |                 |
|--------------|-----------------|
| Modell       | Alvium GM2-2040 |
| Produktserie | Alvium GM2      |
| Status       | Available       |

## Sensor

|                              |                                    |
|------------------------------|------------------------------------|
| Sensortyp                    | Area scan                          |
| Chroma                       | Color, Mono                        |
| Spektrum                     | Visible                            |
| Spektralbereich              | 300 nm to 1100 nm                  |
| Auflösung                    | 4,512 × 4,512 (20.40 MP)           |
| Sensormodell                 | Sony IMX541                        |
| Sensorarchitektur (Material) | cmos                               |
| Verschlusstyp(en)            | Global shutter (GS)                |
| Sensorgröße                  | 12.4 × 12.4 mm (17.5 mm, Type 1.1) |
| Pixelgröße                   | 2.74 µm × 2.74 µm                  |

## Pixelformate

|                         |                                                                          |
|-------------------------|--------------------------------------------------------------------------|
| Sensor-Bittiefe         | 12-bit                                                                   |
| Monochrome Pixelformate | GREY, RAW10, RAW12, RAW8, Y10, Y12                                       |
| YUV-Pixelformate        | UYVY, YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr, YUV422 8-bit |
| RGB-Pixelformate        | BGR8, RGB3, RGB8 (default), RGB888 (default)                             |
| Bayer-Pixelformate      | BayerGR10, BayerGR10p, BayerGR12, BayerGR12p, BayerGR8                   |

## Bildgebungsleistung

|                           |      |
|---------------------------|------|
| Quanteneffizienz @ 529 nm | 68 % |
|---------------------------|------|

## Timing und Verstärkung

|                 |                                                   |
|-----------------|---------------------------------------------------|
| Max. Bildrate   | Mainly depends on hardware and register settings. |
| Belichtungszeit | 11 $\mu$ s to 10 s                                |
| Verstärkung     | 0.0 dB to 48.0 dB                                 |

## I/Os und Stromversorgung

|                           |                                                                |
|---------------------------|----------------------------------------------------------------|
| Nicht-isolierte Leitungen | 2 programmable GPIOs                                           |
| I/O-Anschluss             | Coax, STP                                                      |
| Stromversorgung           | 5 VDC over MIPI CSI-2                                          |
| Stromverbrauch            | Value for the integrated serializer adds to CSI-2 model value. |

## Betriebsbedingungen

|                              |                             |
|------------------------------|-----------------------------|
| Betriebstemperatur (Gehäuse) | -20 °C to 65 °C ((housing)) |
|------------------------------|-----------------------------|

## Mechanische Eigenschaften

|                                      |                   |
|--------------------------------------|-------------------|
| Gehäuseabmessungen (L x B x H in mm) | 41 × 29 × 29      |
| Objektivanschluss/-anschlüsse        | C-Mount, CS-Mount |
| Gewicht                              | 70 g              |

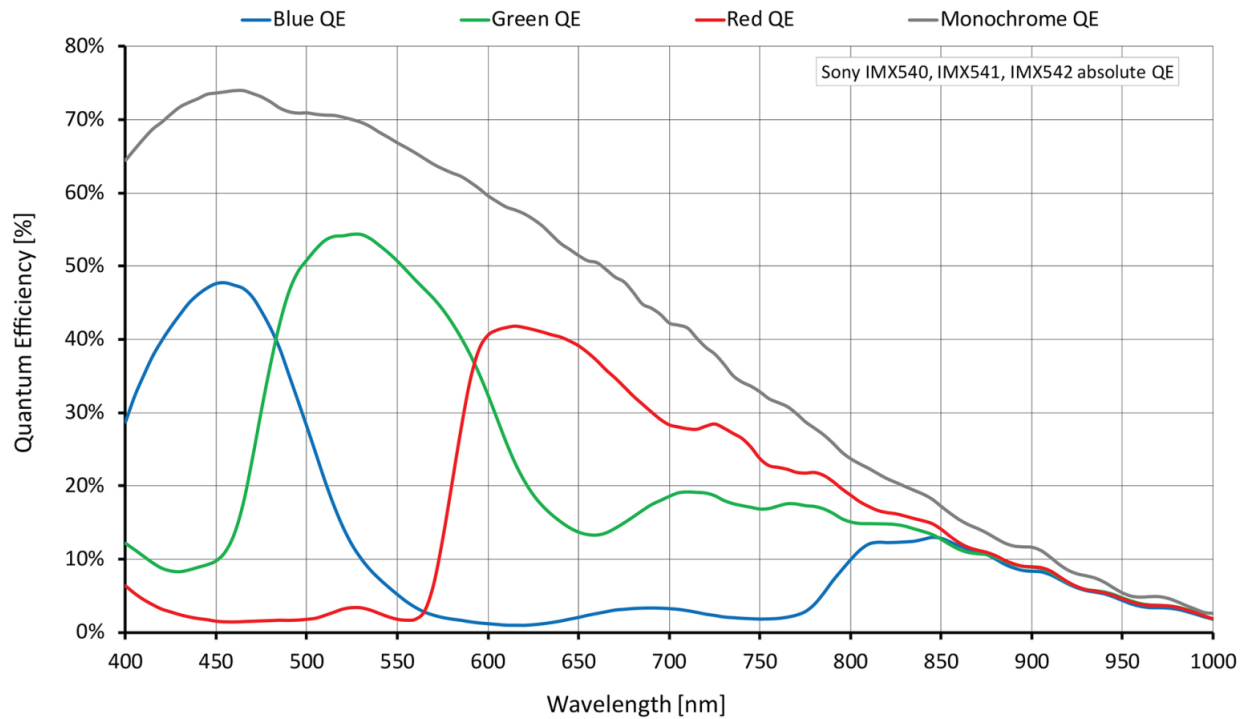
## Onboard-Speicher und FPGA

|                                  |            |
|----------------------------------|------------|
| Bildpuffer (RAM)                 | 256 KByte  |
| Nichtflüchtiger Speicher (Flash) | 1024 KByte |

## Schnittstellen

|                        |                                           |
|------------------------|-------------------------------------------|
| Digitale Schnittstelle | GMSL2, based on MIPI CSI-2, up to 4 lanes |
|------------------------|-------------------------------------------|

## Quanteneffizienz



# Technische Zeichnung

Alvium FP3/GM2 C-Mount Coax



Alvium FP3/GM2 C-Mount STP

