



## Alvium FP3

Alvium FP3-500

Alvium FP3-500 innovative FPD-Link III camera with ON Semi AR0521 CMOS rolling shutter sensor provides industrial performance for cost effective embedded applications.

### Generale

|                   |                |
|-------------------|----------------|
| Modello           | Alvium FP3-500 |
| Serie di prodotti | Alvium FP3     |
| Stato             | Available      |

### Sensore

|                                  |                                   |
|----------------------------------|-----------------------------------|
| Tipo di sensore                  | Area scan                         |
| Croma                            | Color, Mono                       |
| Spettro                          | Visible                           |
| Gamma spettrale                  | 300 nm to 1100 nm                 |
| Risoluzione                      | 2,592 × 1,944 (5.00 MP)           |
| Modello sensore                  | ON Semi AR0521SR                  |
| Architettura sensore (Materiale) | cmos                              |
| Tipi di otturatore               | Rolling shutter (RS)              |
| Dimensione sensore               | 5.7 × 4.3 mm (7.1 mm, Type 1/2.5) |
| Dimensione pixel                 | 2.20 µm × 2.20 µm                 |

### Formati pixel

|                             |                                                                          |
|-----------------------------|--------------------------------------------------------------------------|
| Profondità bit sensore      | 10-bit                                                                   |
| Formati pixel monocromatici | GREY, RAW10, RAW12, RAW8, Y10, Y12                                       |
| Formati pixel YUV           | UYVY, YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr, YUV422 8-bit |
| Formati pixel RGB           | BGR8, RGB3, RGB8 (default), RGB888 (default)                             |
| Formati pixel Bayer         | BayerGR10, BayerGR10p, BayerGR12, BayerGR12p, BayerGR8                   |

## Prestazioni di imaging

|                              |      |
|------------------------------|------|
| Efficienza quantica @ 529 nm | 79 % |
|------------------------------|------|

## Tempi e guadagno

|                           |                                                   |
|---------------------------|---------------------------------------------------|
| Frequenza fotogrammi max. | Mainly depends on hardware and register settings. |
|---------------------------|---------------------------------------------------|

|                      |                        |
|----------------------|------------------------|
| Tempo di esposizione | 8 $\mu$ s to 480.00 ms |
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|          |                   |
|----------|-------------------|
| Guadagno | 0.0 dB to 24.0 dB |
|----------|-------------------|

## I/O e alimentazione

|                   |                      |
|-------------------|----------------------|
| Linee non isolate | 2 programmable GPIOs |
|-------------------|----------------------|

|                |           |
|----------------|-----------|
| Connettore I/O | Coax, STP |
|----------------|-----------|

|               |                       |
|---------------|-----------------------|
| Alimentazione | 5 VDC over MIPI CSI-2 |
|---------------|-----------------------|

|                    |                                                                |
|--------------------|----------------------------------------------------------------|
| Consumo energetico | Value for the integrated serializer adds to CSI-2 model value. |
|--------------------|----------------------------------------------------------------|

## Condizioni operative

|                                  |                             |
|----------------------------------|-----------------------------|
| Temperatura operativa (Custodia) | -20 °C to 65 °C ((housing)) |
|----------------------------------|-----------------------------|

## Proprietà meccaniche

|                                       |              |
|---------------------------------------|--------------|
| Dimensioni custodia (L x P x A in mm) | 41 × 29 × 29 |
|---------------------------------------|--------------|

|                     |                            |
|---------------------|----------------------------|
| Attacco/i obiettivo | C-Mount, CS-Mount, S-Mount |
|---------------------|----------------------------|

|      |      |
|------|------|
| Peso | 70 g |
|------|------|

## Memoria onboard e FPGA

|                       |           |
|-----------------------|-----------|
| Buffer immagine (RAM) | 256 KByte |
|-----------------------|-----------|

|                              |            |
|------------------------------|------------|
| Memoria non volatile (Flash) | 1024 KByte |
|------------------------------|------------|

## Interfacce

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Interfaccia digitale | FPD-Link III, based on MIPI CSI-2, up to 4 lanes |
|----------------------|--------------------------------------------------|

## Efficienza quantica



