

Manufacturer: Teledyne DALSA  
Address: 605 McMurray Rd.  
Waterloo, Ontario, N2V 2E9  
Canada

Product Name: Falcon4  
Part Number(s): FA-S0-86M16-01-R, FA-S1-86M16-00-R, FA-HM00-M4485, FA-HM01-M4405

Note:  
This datasheet only applies to those part numbers having a “-R” suffix at the end of the full orderable part number.

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## 1. Declaration: European Directive 2011/65/EU Restriction of Hazardous Substances and amendment 2015/863 (RoHS)

This product conforms to the following Directive articles:

**Article 4(1):** Product does not contain restricted substances above maximum concentration values tolerated by weight in homogeneous materials, as follows:

- ❖ Lead (0.1 %)
- ❖ Mercury (0.1 %)
- ❖ Cadmium (0.01 %)
- ❖ Hexavalent chromium (0.1 %)
- ❖ Polybrominated biphenyls (PBB) (0.1 %)
- ❖ Polybrominated diphenyl ethers (PBDE) (0.1 %)
- ❖ Bis(2-Ethylhexyl) phthalate (DEHP) (0.1%)
- ❖ Benzyl butyl phthalate (BBP) (0.1%)
- ❖ Dibutyl phthalate (DBP) (0.1%)
- ❖ Diisobutyl phthalate (DIBP) (0.1%)

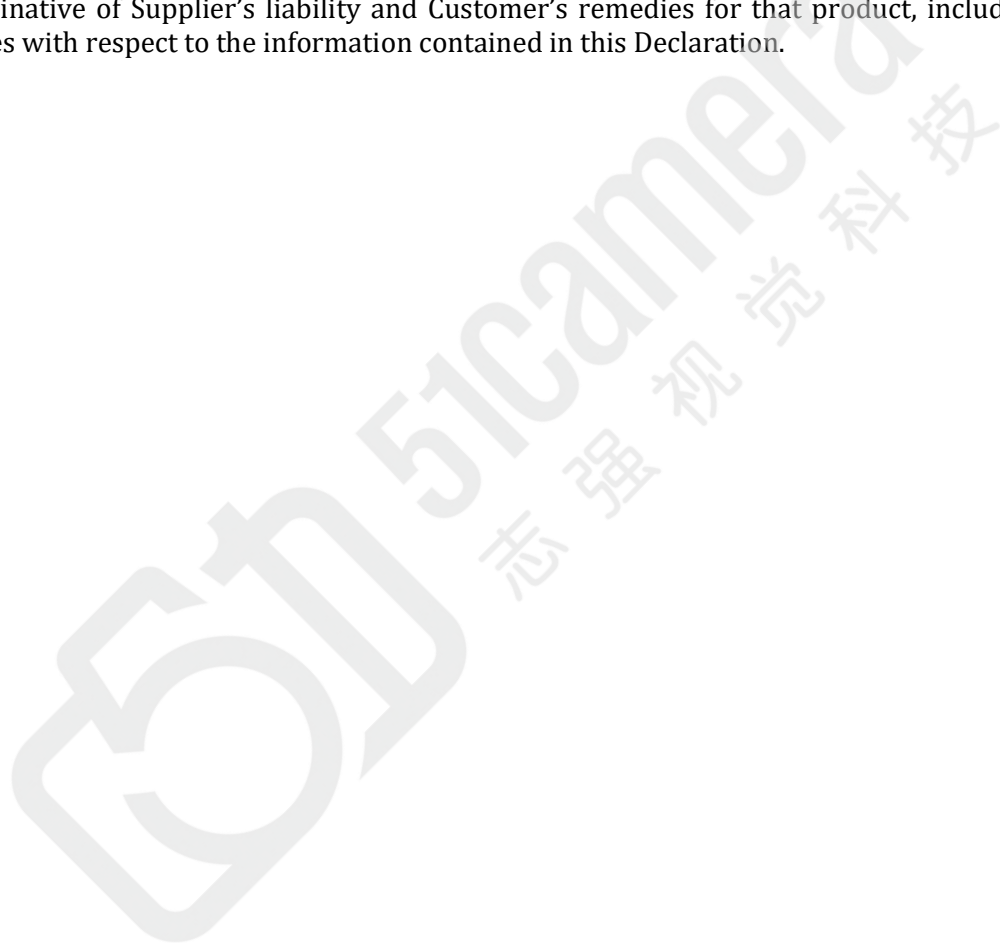
**Article 4(6):** The following Application Exemptions (Annex # - Exemption #) are declared for this Product:

III-6(c)	Copper alloy containing up to 4 % lead by weight
III-7(a)	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)
III-7(c)-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.
III-15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages.

**Article 15(1):** The CE mark is affixed to the camera data plate.

**Declaration:**

Supplier certifies that the information provided in this Declaration is true and correct to the best of its knowledge and belief. While Supplier has used reasonable methods to ensure the accuracy of this information, Supplier has relied upon information provided by others that Supplier is not able to independently verify. Supplier acknowledges that Customer will rely upon this Declaration in determining the compliance of Customer's products with European Union laws that implement the RoHS Directive. If Customer and Supplier enter or have entered into a written agreement with respect to the purchase and sale of the identified product, the terms and conditions of that agreement, including any warranty rights and/or remedies, shall be determinative of Supplier's liability and Customer's remedies for that product, including any disputes with respect to the information contained in this Declaration.



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## 2. Declaration: European Regulation (EC) No 1907/2006 Registration, Evaluation Authorization and Restriction of Chemicals (REACH)

Teledyne DALSA (TDI) manufactures products that would be considered an Article according to regulation Article 3(3): "an object which during production is given a special shape, surface or design which determines its function to a greater degree than its chemical composition".

As a manufacturer established outside of the European Economic Area (EEA), TDI does not have direct obligations under the REACH Regulation however we understand that the businesses that import our products into the EEA may have such obligations.

The following requirements may be of relevance to importers:

1. **Article 7(1): Registration** – if substances in articles are intended to be released during normal and reasonable foreseeable conditions of use and are present exceeding one tonne per year they are required to be registered.

TDI products do not contain any substances intended to be released during normal and reasonably foreseeable use conditions.

2. **Article 7(2): Notification** – when substances of very high concern (SVHC) included on the candidate list for authorization are imported in amounts in excess of 1 tonne per year and present in articles in concentrations > 0.1% wt/wt of the article notification of the European Chemical Agency (ECHA) is required.

TDI does not import SVHCs in amounts in excess of 1 tonne per year and products do not contain SVHCs as identified in the latest ECHA Authorization List (link provided below) in excess of 0.1% wt/wt of the Article.

<https://echa.europa.eu/candidate-list-table>

3. **Article 33: Communicate** – when SVHCs included on the candidate list are included in articles in concentrations about 0.1% wt/wt of the article recipients of the articles must be provided information for the Articles safe use.

TDI products may contain SVHCs as identified in the latest ECHA Candidate List of Substances (link provided below) in excess of 0.1% wt/wt of the article. Refer to Table 1 for a list of SVHCs that are used in some Articles within this product.

<http://www.teledynedalsa.com/imaging/products/>

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<https://echa.europa.eu/candidate-list-table>

Table 1

Substance Name	EC number	CAS Number
Lead	231-100-4	7439-92-1
4-Nonylphenol		84852-15-3
4,4'-isopropylidenediphenol		80-05-7

4. **Article 56: General Provisions** – substances incorporated into articles included in Annex XIV cannot be placed on the market for use after the sunset date unless it has been authorized or exempted.

TDI monitors the composition of materials used within its products and will comply with the provisions based on the contents of Annex XIV by the applicable sunset dates.

<https://echa.europa.eu/authorisation-list>

5. **Article 67: General Provisions** – substances in an article for which Annex XVII contains a restriction shall not be placed on the market for use unless it complies with the condition of restriction.

TDI products do not contain restricted substances as identified (link provide below) in accordance with applicable conditions.

<https://echa.europa.eu/substances-restricted-under-reach>

NOTE: While TDI has used reasonable methods to ensure the accuracy of the information above, TDI has relied upon information provided by its suppliers that TDI is not able to independently verify.

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### 3. Declaration: Electronic Information Product Disclosure Record (China RoHS)

With reference to the People's Republic of China Electronic Industry Standard SJ/T11364-2014, Marking for Control of Pollution Caused by Electronic Information Products, the following product disclosure is made:

Part Number(s): FA-S0-86M16-01-R, FA-S1-86M16-00-R, FA-HM00-M4485, FA-HM01-M4405

#### Environmental Protection Use Period (EPUP)

This product, as referenced by the part number above, will carry a 20 year EPUP. The EPUP refers to the number of years from the date of manufacture that toxic or hazardous substances or elements contained in EIPs will not leak or mutate, under normal operating conditions, stated herein, so that the use of such EIP will not result in any severe environmental pollution, any bodily harm or damage of any assets.

The applicable use conditions under which this period is stated are;

Electrical Supply: +12 to +24 volts DC

Operating Temperature: -20 to +80 °C (product surface)

Humidity: non-condensing



Note: Except as expressly stated herein and as required under mandatory provisions of the SJ/T11364-2014, Teledyne DALSA makes no representation or warranty of any kind, expressed or implied, with respect to EPUP and expressly disclaims any representations or warranties, expressed or implied, with respect to the EPUP.

Names and Contents of Toxic or Hazardous Substances or Elements in Product						
Part Name	Hazardous Substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
PCB	X	0	0	0	0	0
Cable/Connectors	0	0	0	0	0	0
Metal Enclosure	0	0	0	0	0	0
Screws	0	0	0	0	0	0
Rubber	0	0	0	0	0	0
Image Sensor	0	0	0	0	0	0

This table is prepared in accordance with the provisions of SJ/T11364.  
 0: Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572.  
 X: Indicates that the said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572.

## 电子信息产品声明记录

根据中华人民共和国电子行业标准 SJ/T11364-2014, 《电子信息产品污染控制标识及要求》, 声明如下:

产品型号: FA-S0-86M16-01-R, FA-S1-86M16-00-R, FA-HM00-M4485, FA-HM01-M4405

### 环保使用期限 (E P U P)

上述引用的产品型号将保证 20 年的环保使用期限。环保使用期限 (E P U P) 是指从生产日期开始, 在正常操作条件使用电子信息产品 (E I P), 电子信息产品中含的有毒有害物质或元素不致发生外泄或突变, 从而对环境造成污染或对人身、财产造成严重损害的期限。

在环保使用期内, 产品适用的条件如下所述:

电源: +12 至+24 伏直流电

工作温度: -20 至+80 °C (产品表面)

湿度: 非凝结



注解: 除非根据 S J / T 1 1 3 6 4 - 2 0 1 4 强制性条款要求, 在本文里被明确表述外, 对于环保使用期限的任何明示或暗示的陈述或保证, Teledyne DALSA 概不负责, 也不会就此承担任何责任。

产品中有害、有毒物质或元素的名称及组成						
零件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 ((Cr (VI)))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板	X	O	O	O	O	O
电缆/连接器	O	O	O	O	O	O
金属外壳	O	O	O	O	O	O
螺丝	O	O	O	O	O	O
橡胶	O	O	O	O	O	O
图像传感器	O	O	O	O	O	O

此表是依照 SJ / T11364 的条款制备。  
O: 表示该有害物质的含量在零件的均质材料中未超过 GB / T 26572 限量标准所规定的限值。  
X: 表示该有害物质的含量在零件的至少一种均质材料中超过 GB / T 26572 限量标准所规定的限值。

<http://www.teledynedalsa.com/imaging/products/>

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## 4. Product Packaging

The packaging for this product conforms to the following requirements:

European Directive 94/62/EC Packaging and Packaging Waste:

Article 8 (2, 3)      Marking and Identification

Article 11 (1)      Concentration levels of heavy metals present in packaging

China's "Administration on the Control of Pollution Caused by Electronic Information Products":

GB 18455-2010      Packing Recycling Mark

## 5. Accessories

Compatible accessories, within the following categories, denoted by a '-R' suffix in the product part number comply to the requirements denoted within:

- ❖ Cables
- ❖ Lens adapters
- ❖ Mechanical adapters

## 6. Contact Information

Email: [TDI\\_Environmental.Regulatory.Compliance.DDI@Teledyne.com](mailto:TDI_Environmental.Regulatory.Compliance.DDI@Teledyne.com)

## 7. Teledyne DALSA Environmental Information

<http://www.teledynedalsa.com/en/company/environmental-compliance/>



## 8. Revision History

DATE	Rev	Action	Originator	Change
06-June-2019	00	Initial Release	Dave Kennedy	
07-Dec-2020	01	Revision	Mary Weber	Update to include more product part numbers.



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