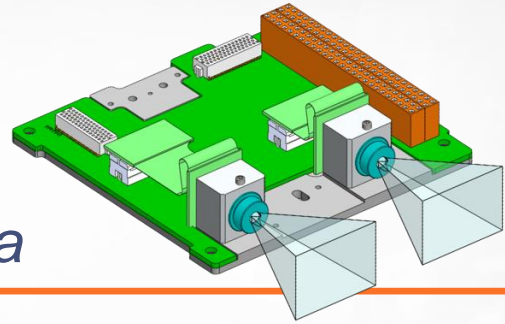




C3D

CubeSat Camera



Introduction

C3D is a space-qualified TRL 9 CubeSat camera system which has proven flight-heritage having flown on both of the UK Space Agency's CubeSat missions with a 100% success rate. C3D may be customised to cater for customers' individual requirements.

Key Features

- Space-flight heritage since 2014
- Wide-field imager (WFI) camera optics
 - Up to three cameras per imager board
 - Two co-aligned cameras as in image above, for stereo or to allow for different specifications
 - Near- and far- field imaging capabilities
 - Colour and black & white sensors available
- Lossless image compression
- Compatible with 1U+ format cubesatellites
- Available as both engineering and flight models
- Applications include earth observation and spacecraft deployment monitoring
- Other custom options also available - enquire for more information

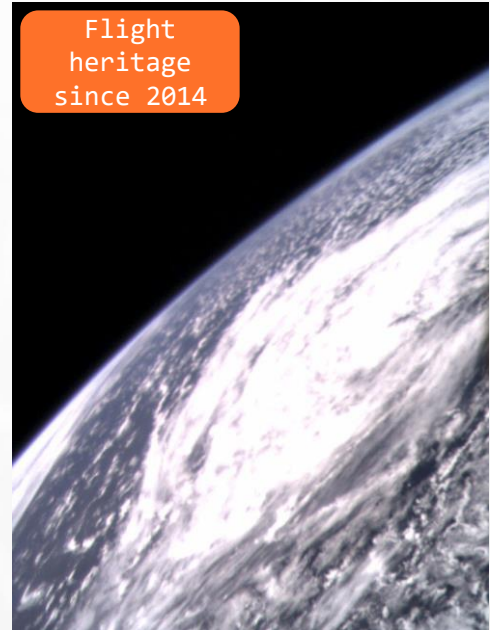


Image credit: AlSat Nano Mission, The Open University

Specifications

Imaging

Spatial resolution @ 650 km	360 m/pixel GSD (with lens below, other variants available)
Image sensor	1.3 MP CMOS: RGB or B&W
Pixels	5.3 μm (1280 x 1024)
Lens	Standard COTS lens 9.6 mm F/3.0
Wavelength Range	400 – 650 nm (RGB, extended with B&W)
Exposure	Auto or fixed

Mechanical and Environmental

Dimensions of board	9.5 x 9.1 x 2.7 cm
Mass (Board + 1x WFI)	85 g
Peak power consumption	845 mW
Operating temperature	-25 to + 65 °C
Survival temperature	-35 to +75 °C (Tested)
Flight heritage	3 years

Data

Data format	8-bit raw and thumbnail (1:10)
On board memory	16 MB SDRAM 8 MB Flash
Image compression	50% JPEG-LS (Lossless)
Data Interfaces	I2C or SPI

© 2017 XCAM. No part of this publication may be reproduced without prior permission in writing from XCAM. Whilst XCAM will endeavour to ensure that any data contained in this product information is correct, XCAM do not warrant its accuracy or accept liability for any reliance on it. XCAM reserve the right to change the specification of the products and descriptions in this data sheet without notice. Prior to ordering products please check with XCAM for current specification details. This product may be protected by patent. All brands and product names are acknowledged and may be trademarks or registered trademarks of their respective holders.

XCAM Ltd.
2 Stone Circle Road
Northampton
NN3 8RF
UK

Tel: 44 (0)1604 673700
Fax: 44 (0)1604 671584
Web: www.xcam.co.uk
Email: sales@xcam.co.uk