

ITAR FREE

Space Qualified



Description

Nano Sun Sensor on a Chip (nanoSSOC) is a two-axes and low cost sun sensor for **high accurate** sun-tracking, pointing and attitude determination. The device measures the incident angle of sun ray in two orthogonal axes, providing a high sensitivity based on the geometrical dimensions of the design.

NanoSSOC sun sensor is based on MEMS fabrication processes to achieve high integrated sensing structures. nanoSSOC-A60 has tiny size, low weight and low power consumption to be the perfect ADCS sensing solution for nanosatellite platforms.

Qualification Data and Flight Heritage

Operating Temperature	-30° to 85° Celsius
Radiation	>100 kRad (gamma) 6 MeV 3000 kRad (protons)
Random vibration	14,1g @ 20-2000 Hz
Shock	3000 g @ 1-100 ms

Flight heritage since 2016
with hundreds of units in orbit.

Mechanical Interface

Technical Characteristics

Type	2 orthogonal axes
Field of View	±60° (customization available)
Accuracy	< 0.5° (3sigma) < 0.1° (precision)
Electrical interface	4 voltage outputs 10-pin micro-connector
Power supply	3.3V / 5V < 2mA consumption
Mechanical interface	27.4 x 14 x 5.9 mm 4g
Housing	Aluminum 6082 Black anodizing

