

Key Features

- DO-254 and DO-178C Safety Certifiable
- ARINC 429
- ARINC 708
- MIL-STD-1553B
- Analog and Discrete signals
- VITA 42.0/42.3/46.9



Overview

The OCI-Safe-M-1 is a Switched Mezzanine Card (XMC) that supports a range of interfaces, including ARINC 429, ARINC 708, MIL-STD-1553B.

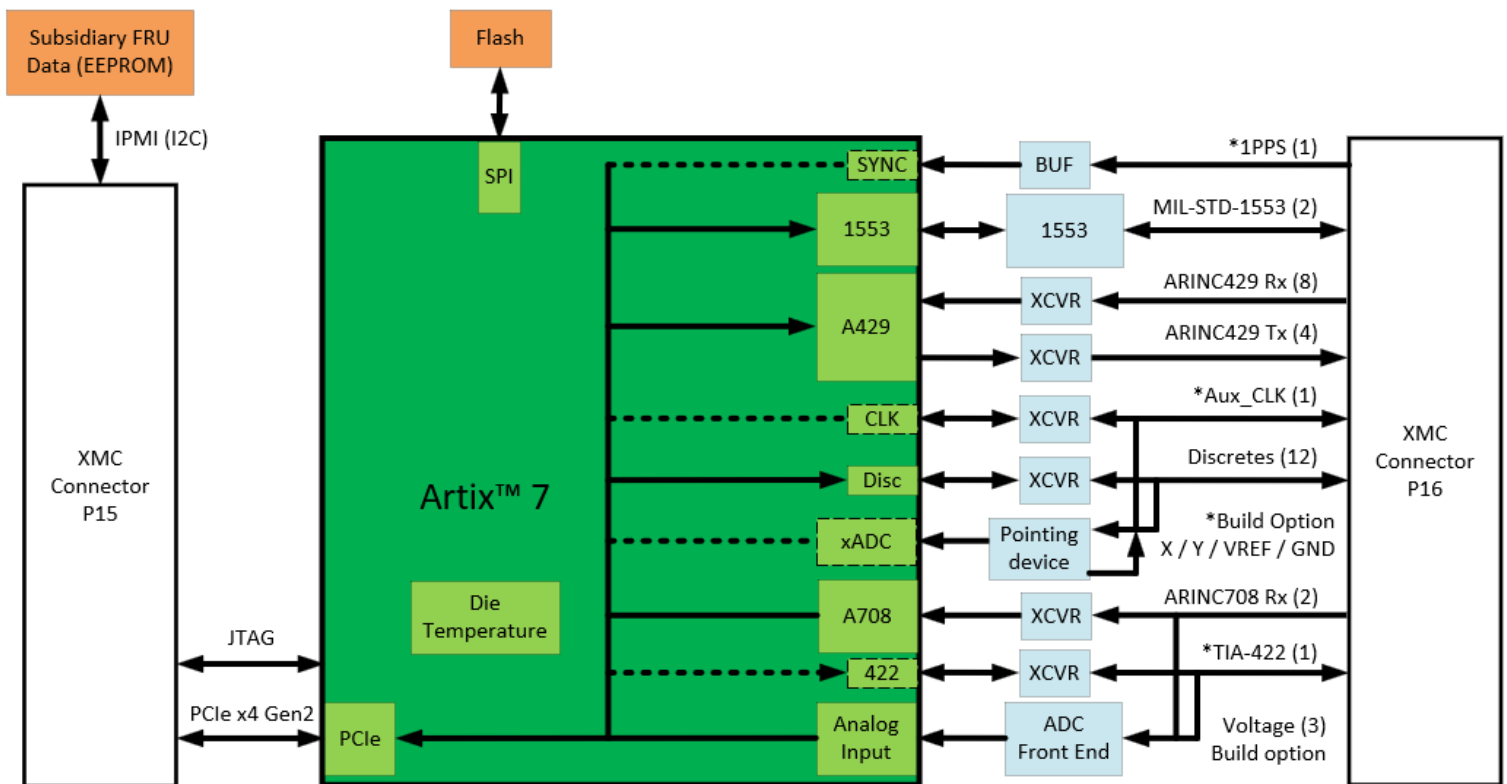
The OCI-Safe-M-1 is designed to meet the requirements of DO-254 and DO-178C, making it suitable for use in safety-critical avionics applications. The OCI-Safe-M-1 provides Built-In-Test (BIT), health monitoring features and supports operation over elevated temperatures, vibration, acceleration, and shock.

The OCI-Safe-M-1 is designed to be mounted on a host processor card and provides a PCIe x4 Gen 2 interface for communication with the host system.

Applications

- Weather RADAR
- Data concentration
- Flight System:
 - Guidance
 - Navigation
 - Control





*Dashed Lines indicate future growth possible

Power

- 5.5W Maximum 12V
- 4W Maximum 3.3

Environment

- Operating Temperature: -40°C - +85°C
- Non-Operating Temperature: -54°C - +85°C
- Vibration: VITA 47 Section 4.4.3, Vibration Class V3
- Shock: VITA 47 Section 4.5.1, Operating Shock Class OS1 and 4.5.3 Bench handling shock.
- Humidity: VITA 47 Section 4.6, 100% humidity installed

Cooling

- VITA 48.X Conduction, Air Flow Through, Liquid

Host Interface

- x4 PCIe Gen 2
- VITA46.11 targeted FRU data interface

Backplane Interface

- 2 MIL-STD-1553B
- 8 ARINC 429 RX
- 4 ARINC 429 TX
- 1 ARINC 708 RX (+1 future growth)
- 1 TIA-422
- 12 Discrete I/O

Additional Features

- Built in Test
- Fan Tachometer
- Pointing Device (track ball)
- Analog Voltage input (ex. RADALT)
- GPS and/or CLK synchronization