EMBEDDED VISION SOLUTIONS

INTERCONNETCS FOR HIGH-PRECISION VISION SYSTEMS
EMBEDDED VISION

Samtec PRODUCT INNOVATIONS and TECHNICAL SUPPORT enabling all aspects of a vision system.

Samtec offers a wide variety of product solutions that enable vision system technology, in addition to providing the highest level of service and support in the industry.

LIGHTING / ILLUMINATION

IMAGE SENSOR

CAMERA MODULE

PROCESSING UNIT

SYSTEM I/O

IMAGE OUTPUT

APPLICATIONS

ADAS/LIDAR

VISUAL INSPECTION

UAV/DRONES
RAZOR BEAM™ LP

- Ultra-fine pitch: 0.40 mm or 0.50 mm
- Ultra-low profile, slim body designs
- Stack heights down to 2 mm
- Jack screw standoffs (JSO Series) available for unmating assistance and protection from component damage

Ultra Micro Solutions Connecting the Image Sensor through the Camera

HETEROGENEOUS PACKAGE INTEGRATION
Integrating CMOS Image Sensor with Image Processor Die

PACKAGE MINIATURIZATION
Low-Profile and Small Footprints

samtec.com/ultra-micro

Contact SME@samtec.com
Rugged, High-Speed Strips with Full Engineering Support

High-Speed Strips ideal for High-Vibration Applications

EDGE RATE®
- Rugged contact system decreases crosstalk, increases cycle life, optimizes SI performance
- 0.635 mm pitch - slim 2.5 mm body width (ERM6/ERF6)
- 0.50 mm pitch (ERM5/ERF5) - 40% space savings vs 0.80 mm pitch option
- 0.80 mm pitch (ERM8/ERF8) up to 200 I/Os
- 1.0 or 1.5 mm contact wipe
- 360° shielding

ULTRA MICRO POWER
2 mm Pitch & Low-Profile, 15 A per Blade

MICRO COAX/TWINAX
Application Specific Solutions Inside the Camera Module

samtec.com/connectors
samtec.com/high-speed-cables
High-Density Stacking Ideal for SoM/CoM Applications

SEARAY™
- Open-pin-field array, providing maximum grounding and routing flexibility (DP, SE, Power)
- Variety of configurations, including low-profile
- Up to 720 I/Os
- Rugged Edge Rate® contacts

ACCELERATE® HD
Ultra-Dense, High-Speed Multi-Row Mezzanine Strip

Z-RAY®
Ultra-Low-Profile One-Piece Array, Custom Geometries

Hundreds of I/Os with Performance to 28 Gbps NRZ

0.80 mm vs. 1.27 mm

samtec.com/arrays
High-Performance I/O Supporting Low System Latency

RF Interconnects Supporting CoaXPress® and 12G-SDI Requirements

HD-BNC™, DIN 1.0/2.3, BNC
- Rugged mechanical latching: HD-BNC™ and BNC
- Space-saving design: HD-BNC™ and DIN 1.0/2.3
- 12G-SDI performance: HD-BNC™, DIN 1.0/2.3, BNC

CoaXPress®

12G SDI

FIREFLY™
Mid-board Optical Engines Provide I/O to 28 Gbps

EDGE CARD VARIETY
0.50 mm to 2.00 mm Pitch, PCI Express® Sockets

samtec.com/firefly
BOARD STACKING FLEXIBILITY & MICRO/RUGGED CABLES

FLEXIBLE STACKING

- Headers and sockets with the most flexibility in the industry
- Pitch variety from 0.80 mm to 2.54 mm
- Post height: adjustable in .005” increments
- Body positions: adjustable in .005” increments
- Board stacking distance: 1.65 mm to 48.51 mm
- Pins: 1 to 300
- Termination: surface mount, through-hole, press-fit, mixed-technology
- Applications: right-angle, pass-through, bottom-entry, one-piece, low-profile, elevated, self-nesting
- Easily customizable

DISCRETE WIRE
0.80 mm to 6.35 mm Pitch, 32 to 10 AWG, Power: 3 to 35 A/Contact

IP67/IP68 SOLUTIONS
Bayonet/Push-Pull Circulars, Space-saving Rectangulars

Interconnects for Lighting Units that Optimize Life-Span and Functionality

samtec.com/FlexibleStacking