

# The Avago Advantage



Applications Solutions

## Avago Technologies Solutions for **Motor Control Applications**



Your Imagination, Our Innovation  
*Sense • Illuminate • Connect*

## Avago Technologies Solutions for **Motor Control Applications**

Avago Technologies industrial solutions help provide elements of a closed loop motor control system. Avago products cover a number of the elements of motor control systems including current sensing and control of the motor, encoders to sense the position and speed of the motor, and communications interfaces that couple the motor control logic to other parts of system.



### IGBT Gate Drivers

Avago gate drive optocouplers provide isolated high current gate driver for IGBTs and MOSFETs. These gate drive optocouplers come in wide range of output current from 0.4A to 5A, and selected parts with integrated features such as Active Miller Clamp, under voltage lockout, fault status feedback and de-saturation detection.

#### **Featured Products**

- Rail-to-Rail, High Speed, High Output Current (up to 4A) Gate Drivers
- (Fault status feedback, automatic fault reset) Isolated Gate Driver

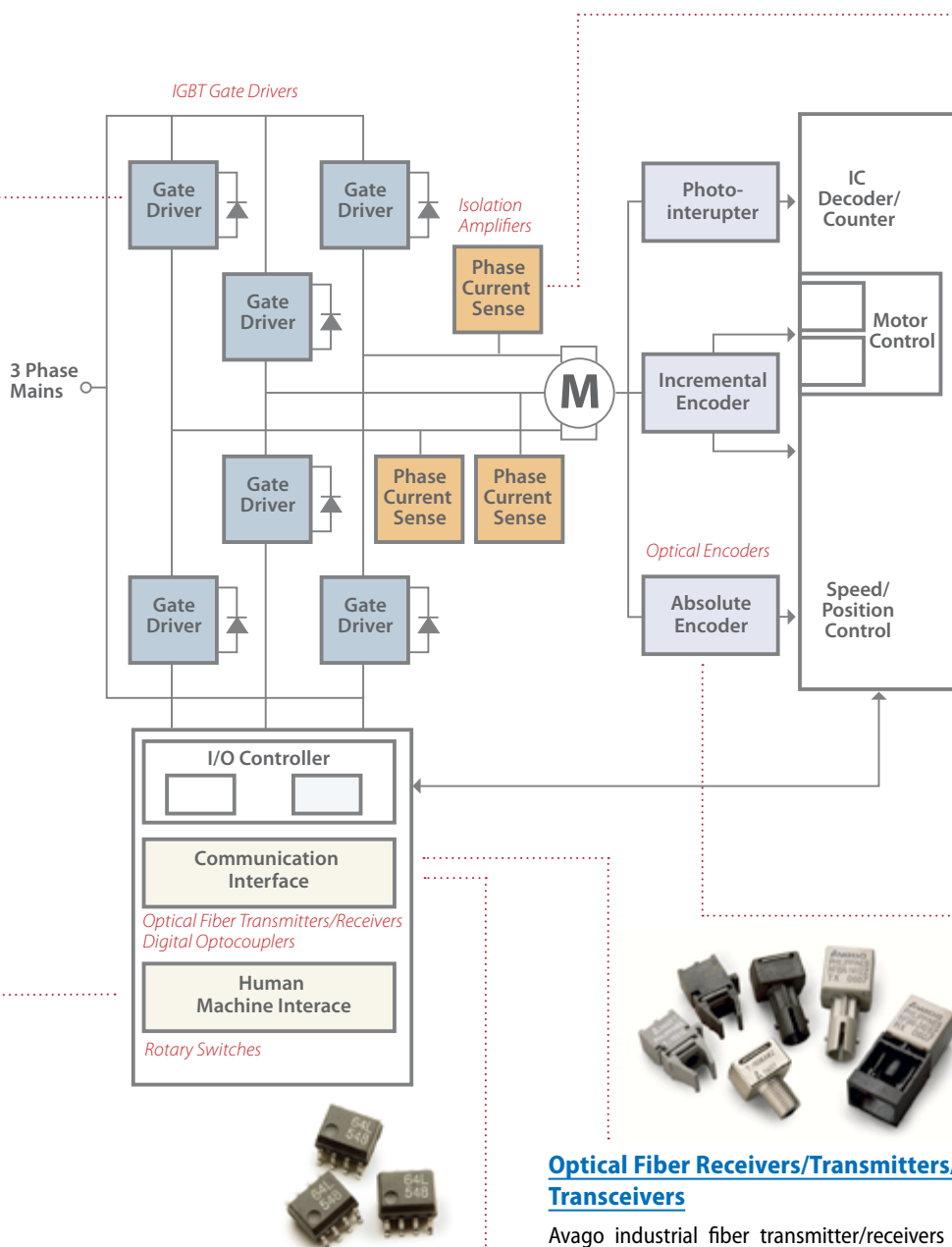


### Rotary Switches

The HRPG series is a family of miniature panel mount optical encoders, also known as Rotary Pulse Generators (RPG) and digital potentiometers. The HRPG is designed to be mounted on a front panel and used as a rotary, data-entry device.

#### **Featured Products**

- Miniature panel mount optical encoders



### Digital Optocouplers

Avago digital optocouplers provide low power, multi-channels and a wide speed range for digital isolation without compromising on insulation and noise isolation performance.

#### Featured Products

- 10MBd Logic Gate Digital Optocouplers
- 5MBd CMOS Digital Optocouplers
- 1MBd Open-Collector Output Digital Optocouplers
- Multi-Channel Bi-Directional Digital Optocouplers
- 15/25MBd High Speed Digital CMOS Optocoupler

### Optical Fiber Receivers/Transmitters/Transceivers

Avago industrial fiber transmitter/receivers are designed to operate reliably for data transmission over fiber in applications where the highest electrical isolation between the transmitter and receiver sides is needed. Due to the insensitivity of the fiber to electromagnetic radiation, they are suitable for use in EMI-polluted surroundings.

#### Featured Products

- Plastic Optical Fiber Transmitters & Receivers (Distances to 100m)
- Glass Optical Fiber Transmitters & Receivers (Distances to 5000m)
- 650nm Transceiver with Versatile-Link connector for Fast Ethernet over POF
- Versatile Fiber Optics Link for DC to 50Mbaud
- Fiber Optics Link for DC to 10Mbaud

### Isolation Amplifiers

Avago isolation amplifier optocouplers provide high precision, stability, and common mode rejection for current and voltage sensing applications without compromising high noise or magnetic field immunity.

#### Featured Products

- Miniature Isolation Amplifiers
- Optically Isolated Sigma-Delta Modulator with Digital Output
- Precision Optically Isolated Voltage Sensor

### Optical Encoders

Avago offers a broad range of optical encoders including absolute, incremental and magnetic versions featuring

- Single and multi-turn versions
- A variety of resolutions
- Transmissive and reflective versions

#### Featured Products

- Reflective optical encoders
- Multi-turn encoders
- Single-turn absolute encoders
- Incremental encoders and code wheels

# Your Imagination. Our Innovation



Avago Technologies is a leading designer, developer and global supplier of a broad range of analog, mixed signal and optoelectronics components and subsystems with a focus in III-V compound semiconductor design and processing. Backed by an extensive portfolio of intellectual property, Avago products serve three primary target markets: wireless communications, wired infrastructure, and industrial and other. Avago has a global employee presence and heritage of technical innovation dating back 50 years to its Hewlett-Packard roots.

## Avago products serve three diverse end markets

**Wireless Communications** serving the smartphone/handset and Base Station infrastructure markets with leading-edge products that include:

- Power Amplifiers
- Front End Modules
- Film Bulk Acoustic Resonator (FBAR) Filters
- GPS/GLONASS LNAs
- Optical Finger Navigation
- LED Backlighting, Screen Illumination
- Ambient Light and Proximity Sensors

**Wired Infrastructure** for switches/routers, data centers, supercomputers and storage/servers with products that include:

- 168Gb Parallel Optic Arrays
- 28Gb SerDes ASICs in 28nm
- Storage Fibre Channel Transceivers
- QSFP+/SFP+ Ethernet Transceivers

**Industrial and Other** for alternative energy power generation, electronic sign and signals, automated manufacturing, automotive lighting, GPS/GLONASS navigation, motor inverter system, battery charging and management, infotainment systems and vehicle safety systems with products that include:

- Inverters
- Isolation and Digital Optocouplers
- Motion Control Optical & Magnetic Encoders
- Polymer Optical Fiber
- Indicator and Display LEDs



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TECHNOLOGIES