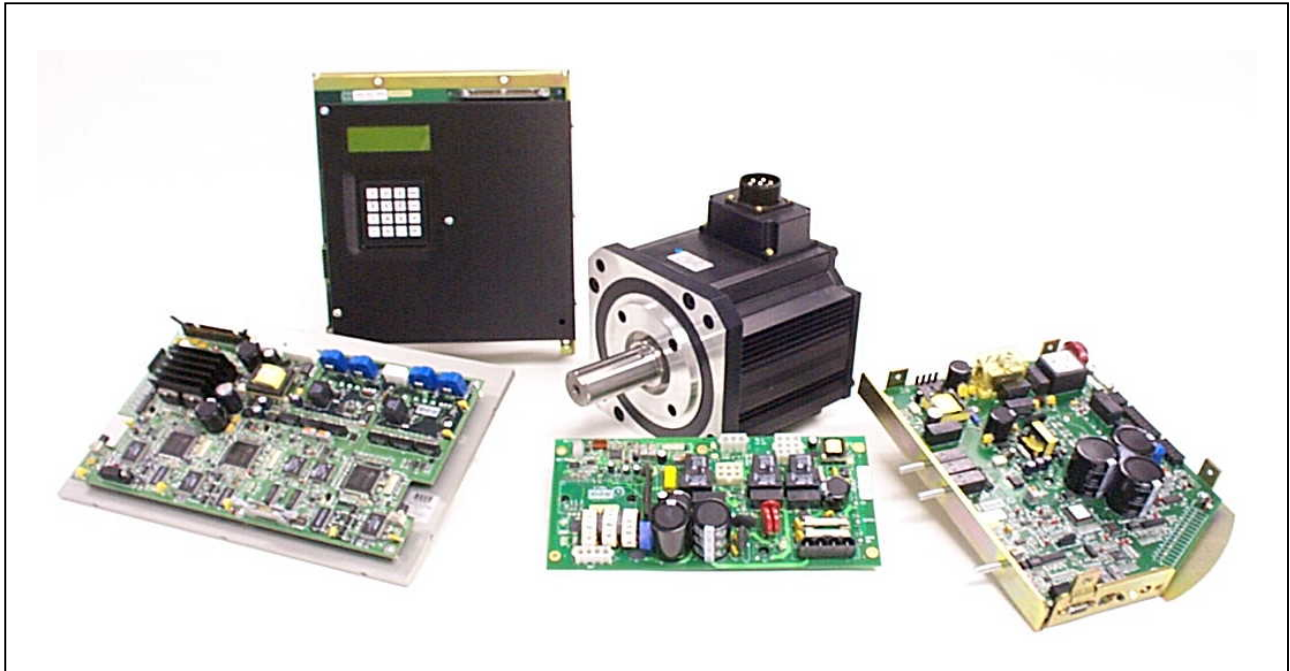




## Intelligent Servo Drive (ISD)



The ISD is a concept more than it is a product. IIS has developed a series of building blocks that can be easily combined in a custom design to produce an intelligent motion control system for large volume OEM's. These building blocks, both hardware and software, enable IIS to provide OEM's with a low cost motion control system optimized specifically for their application.

One of the strengths of the ISD is that it does **not** have a standard board layout or packaging configuration. The OEM gets to optimize the fit and function of the ISD thereby providing the most cost effective, proprietary solution.

### Building Blocks Include:

- Servo Driver with brushless servo motor
  - Up to 1000W Continuous, 2000W Peak
  - 8/16 KHz PWM frequency
  - Encoder or resolver feedback
  - Sine wave commutation
  - Under/over voltage sensing
  - Short circuit protection
  - Over temperature protection
  - Torque, speed and position control

- Variable Frequency Drive with 3PH 230 VAC motor (VFD)
  - Up to 1.5 Hp, 1.5 X Peak
  - 8/16 KHz PWM frequency
  - V/F & vector control
  - Under/over voltage sensing
  - Short circuit protection
  - Over temperature protection
  - Open or closed loop with encoder
  - Speed and position control
  
- Motor bus power supply: 320/640 VDC nominal
- 230, 460 or 115 VAC (Voltage doubler for use on 115 VAC line)
- Regeneration circuit
- Logic and I/O power supplies
- 24 VDC Isolated I/O points
- Analog I/O (12 bit resolution)
- DSP Microprocessor core with flash memory
- High speed serial buses for expansion and special functions
- USB, RS232 and RS485 Serial communications
- SERCOS
- Modbus
- Safety relays & ESTOP
- UL/CE compliant design
- I/O sequencing
- Operator display and keypad functions
- Simple LED or 7 segment status/error displays
- Programmable in assembly language or C

The OEM can combine any of the building blocks to produce an optimized automation solution. The resulting product is optimized for fit and function at the lowest possible cost.

Typically, IIS develops the software and hardware based on a firm customer specification for a Non Recurring Engineering fee. The software is then turned over to the OEM including training. The OEM can then make future software changes with existing in house staff or contract IIS to make changes or upgrades. In either case the OEM owns the rights to the software and to the particular hardware configuration developed for that OEM. IIS retains the rights to the core technologies used in the ISD and will provide schematics with the appropriate non-disclosure agreement.

Each ISD is a private labeled device. IIS will protect the OEM, guaranteeing that the after market sales are routed through the OEM. IIS is also willing to private label servo motors used with the ISD.

Specifications subject to change without notice

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