The Dual Axis SynqNet™ Amplifier (DASA) is a SynqNet™ servo drive designed to meet customer-specific cost, function and dimension requirements. This extremely compact package incorporates two independent servo drives designed to each provide up to 5A RMS continuous current from a 48VDC bus. The SynqNet™ interface enables the OEM to drastically cut down on the machine's wiring and at the same time simplifying machine assembly. I/O monitoring in real-time is supported by SynqNet™ at the servo update rate, which can be up to 16kHz for the DASA. This enables all machine I/O to be connected to the amplifier, further cutting down on wiring complexity and cost. Real-time diagnostics enable potential failures to be identified before they occur, hence reducing machine down time.
SynqNet™ (http://www.synqnet.org) is a high performance, all-digital synchronous network designed for multi-axis motion control applications. The physical layer of SynqNet™ is based on IEEE 802.3 standards for 100BASE-TX, the physical layer of Ethernet, while the data link and application layers of SynqNet™ are specifically designed for motion control applications. The 100BASE-TX media system is based on specifications published in the ANSI TP-PMD physical media standard. The 100BASE-TX system operates over two pairs of wires, one pair for 'receive' data signals and the other pair for 'transmit' data signals.

Features

Real-Time Data Monitoring
- Bus voltage
- Drive temperature
- Current
- Analog inputs

Feedback
- Incremental Encoder

Servo Control
- Fully digital current loop
- Advanced patented sinewave commutation technology provides smooth, precise low-speed control as well as high-speed performance
- Accurate torque control due to precision balanced current loops with closed loop sensors
- Patented torque angle control enhances motor performance

I/O
- Dedicated brake control
- 14 digital I/O points, configurable over SynqNet™ to be either inputs or outputs
- 6 general purpose analog inputs

SynqNet™
- Network bandwidth for torque updates up to 16kHz
- Remote diagnostics of motor drive performance
- Remote drive configuration and setup
- Real-time diagnostic programming/data collection over SynqNet
- Automatic network configuration and integrity check
- Cabling over 100 Meters between each node
- Electrical isolation for robust noise immunity