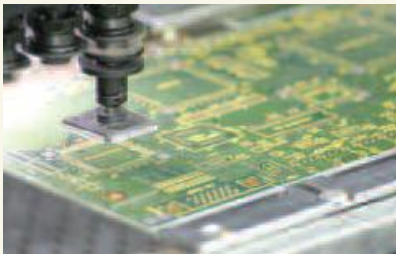


SODICK AMERICA CORPORATION

Located in San Jose, California in the heart of the Silicon Valley, Sodick America operates as a Research and Development facility for Sodick Co., Ltd. since 2000. Sodick America Corp. develops state-of-the-art motion control technology, the "K-SMC™" series motion controller was developed for Sodick's linear motor driven machine tools resulting in the world's best precision machining. Now, Sodick America presents the latest products in Linear Motion Control Technology: KSMC™-SiLink and KSMC™-MaLink.



SODICK TECHNOLOGY COMPANY
IN SILICON VALLEY

K-SMC™ Motion Controller
KSMC™-SiLink

&

K-SMC 3rd Generation Motion Controller
KSMC™-MaLink

KSMC™-SiLink and KSMC™-MaLink are two of Sodick America's latest motion control technologies that utilize multiple central processing units to yield the highest level of motion control performance.

KSMC™-SiLink is capable of controlling up to 8 axes and has been designed for Sodick's Electrical Discharge Machining and High-Speed Milling Machines.

KSMC™-MaLink controls up to 32 axes for Sodick's high-end machine tools.

| Specifications | KSMC-SiLink | KSMC-MALINK |
|---|--|--|
| Type of Product | Motion Controller | Motion Controller |
| Number of Axes | 8 axes | 32 Axes |
| Controllable Motor Type | Sinusoidal Communication for Stnchronous AC Motor | Sinusoidal Communication for Synchronous AC Motor |
| Output Signal | PWM & DAC | PWM & DAC |
| Number of Encoder Channels | Maximum 16 Channels | Maximum 32 Channels |
| Quadrature Decode of Encoder Input | x1, x2, x4 quadrature decode | x1, x2, x4 quadrature decode |
| Maximum Ecoder Count Rate | 60MHz (1/2, 1/4, 1/8) | 60MHz (1/2, 1/4, 1/8) |
| Available Encoder Type | INC-Encoder, Analog Encoder (optional), Endat (optional) | INC-Encoder, Analog Encoder (optional), Endat (optional) |
| ADC-Input Resolution | Up to 16 bit | Up to 16 bit |
| PWM Frequency | Maximum 50 kHz | Maximum 50 kHz |
| PWM Count Frequency | Typically 120 MHz | Typically 120 MHz |
| DAC Resolution | Maximum 16 bit | Maximum 16 bit |
| Number on DAC Channels | 8 Channel Digital Output (Requires DAC Board) | 32 Channel Digital Output (Requires DAC Board) |
| Sin-Wave Table Size | 4096 | 4096 |
| Processor Type & Speed | SH4R @ 240 MHz / PowerPC 405 @ 300 MHz | BCM1125H @ 800MHz / PowerPC 405 @ 300MHz |
| ASIC | PWM-Circuit, Encoder Counter, DAC, I/O, Serial Bus Current-Loop | PWM-Circuit, Encoder Counter, DAC, I/O, Serial Bus Current-Loop |
| Bus Interface | PCI | PCI |
| PCI-Common Memory Size | 16 MB | 16 MB |
| Additional Communications | RS-232C, H-UDI Port (Hitachi User Debugging Interface: JTAG) | RS-232(JTAG) |
| Board Structure (see structure diagram) | Two Boards | Two Boards |