

## 34952A multifunction module with 32-bit DIO, 2-channel D/A and totalizer

The multifunction module offers the flexibility you need for system control. The 34952A has four 8-bit digital I/O channels, a 100- kHz gated totalizer, and two  $\pm 12$  V analog outputs—all on a single earth-referenced module. The digital inputs and totalizer input may be included in a scan list. Alarm limits for the digital and totalizer inputs are evaluated continuously, capturing and logging alarm conditions even between scans. Connections can be made via standard 50-pin Dsub cables or detachable terminal block. The 34952T terminal block has a pinout for connection to an external Opto 22 board.

### Digital input/output characteristics

Four 8-bits channels, 8 bits wide, input or output, non-isolated

Vin(L)	< 0.8 V (TTL)
Vin(H)	> 2.0 V (TTL)
Vout(L)	< 0.8 V @ Iout = -400 mA per output
Vout(H)	> 2.4 V @ Iout = 1 mA
Vin(H) max	< 42 V with external open drain pull-up
Alarm	Maskable pattern match or state change
Speed	4 ms (max) alarm sampling
Latency	5 ms (typical) to 34980A alarm output
Read/write speed	95/s

### Totalize input characteristics

Max count	$2^{26} - 1$
Totalize input	100 kHz (max) rising or falling edge, programmable
Signal level	1 Vp-p (min) 42 Vpk (max)
Threshold	0 V or TTL
Gate input	TTL-Hi, TTL-Lo, or none
Count reset	Manual or read + reset
Read speed	85 rds/s

### Analog output characteristics

DAC 1, 2	$\pm 12$ V, non-isolated
Resolution	1 mV
IOUT	10 mA max
Settling time	1 ms to 0.01% of output
Accuracy	$\pm$ (% of output + mV)
1 year	(0.25% + 20 mV)
Temp. coefficient	$\pm$ (0.015% + 1mV)/°C

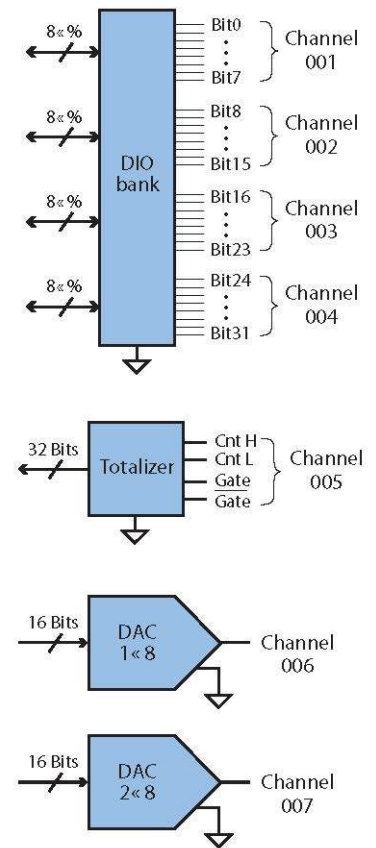


Figure 15. 34952A multifunction module