

Model Number
SDC003

LANSHARC SMART DIGITAL CONTROLLER

Revision: -A-
ECN #: n/a

INPUTS:

Dynamic Channels 1, 2, or 4
Static Channels 0 or 4
Digital 2

DYNAMIC INPUTS:

Input Voltage Range ±2.5 Vpk
Input Signal Conditioning ICP® [1]
Constant Current Sensor Excitation 5 ± 2 mA
AC coupling, -3 dB 20 Hz
Maximum Frequency Range 5 or 40 kHz
Channel Crosstalk <-80 dB [2]
Harmonic Distortion <-70 dB [3]
Amplitude Accuracy <3 % [2]
Amplitude Match <1 % [2]
Phase Match <5 Degrees [2]

STATIC INPUTS:

Input Voltage Range 0 to 2.5 Vpk [4]
Leakage Current 1 µA [5]

DIGITAL INPUTS:

Typical Use tachometer/trigger
Isolation 600 V
Drive Requirements 10 – 50 mA [6]

PROCESSING:

Primary ADC Resolution 24 bit
Maximum Sample Rate 128 kHz
Dynamic Range 110 dB [7]
Block Length application dependent
DSP Analog Devices ADSP 21065L SHARC®
Microcontroller Analog Devices AduC812 MicroConverter

OUTPUTS:

Hardware Status LED 3 green, 1 red
Communication Interface RS232
Solid State, Optically Isolated Relays 4

MEMORY:

16 SDRAM / 8 Flash Mbytes

POWER USAGE:

150 @ 24 mA @ VDC

MECHANICAL ENCLOSURE:

2x4x7 inches [8]

TEMPERATURE RANGE:

0 – 50 Degrees C

All specifications are at room temperature unless otherwise specified.

NOTES:

- [1] Supports IEEE P1451.4 TEDS
- [2] For input 2.5 Vpk @ 250 Hz
- [3] Ratio amplitude main frequency to amplitude second harmonic
- [4] Absolute maximum rating –0.3 Vpk to +5.3 Vpk
- [5] Typical
- [6] Requires current limiter for input >1.5 Vpk
- [7] Typical, guaranteed >100 dB
- [8] Aluminum, NEMA4

SUPPLIED ACCESSORIES:

ICP® is a registered trademark of PCB Piezotronics, Inc.
SHARC® is a registered trademark of Analog Devices

In the interest of constant product improvement, specifications may change without notice.

Project Engineer:

JEB

Product Manager:

MTS

Mkt Team Leader:

MTS

Spec Number:

PS-0004

Date: 18 JUL 03

Date: 18 JUL 03

Date: 18 JUL 03

 **THE MODAL SHOP**
AN MTS COMPANY

10310 Aerohub Boulevard
Cincinnati, OH 45215 USA

800-860-4867 Fax (513) 458-2172

sales@modalshop.com
SAM-F020 revNR 04/04/03