Nano-ACE™
MIL-STD-1553 BC/RT/MT

Product Brief

Model: BU-67833LC

Nano-ACE is the world's fastest and lowest power complete SPI to MIL-STD-1553 interface, providing support for Bus Controller/Remote Terminal/Monitor, enabling the development of more compact and higher density boards.

Key Features

- MIL-STD-1553 Protocol, RAM and Dual Low Power Transceivers
- 1 Dual Redundant MIL-STD-1553 Channel
  - BC, RT, MT or RT/MT Operation
  - 4K x 16, 4K x 17, or 32K x 17 RAM
  - Optional RAM Parity
- 48 Pin QFN Package, 7mm x 7mm x 1mm (0.28 in x 0.28 in x 0.04 in)
- 50MHz 4-Wire Serial Peripheral Interface (SPI) to the Host Processor
- Autonomous Self-Test
- Optional Auto-Initialization From External EEPROM
- Ultra Low Transceiver Power
- +3.3V Only Operation
- Fully Compliant to MIL-STD-1553A/B and MIL-STD-1760

Benefits

- Ultra Small Size Saves Space and Enables More Compact and Higher Density Boards
- Replaces 2 Transceivers, MIL-STD-1553 Protocol Core, and Memory
- RT Validated
- Tx Inhibit Ball for MT Only Applications
- Software and Register Compatible with ACE, Mini-ACE®, Enhanced Mini-ACE®, Micro-ACE®, and Mini-ACE® Mark3 Series Remote Terminals

Applications

- Displays
- Simple Systems
- Radios/Modems
- Stores Management

Custom Design Capability - DDC can customize designs for all products, ranging from simple modifications of standard products to fully customized solutions for commercial, military, aerospace, and industrial applications.

For more information: www.ddc-web.com/BU-67833LC

Printed on recycled paper.

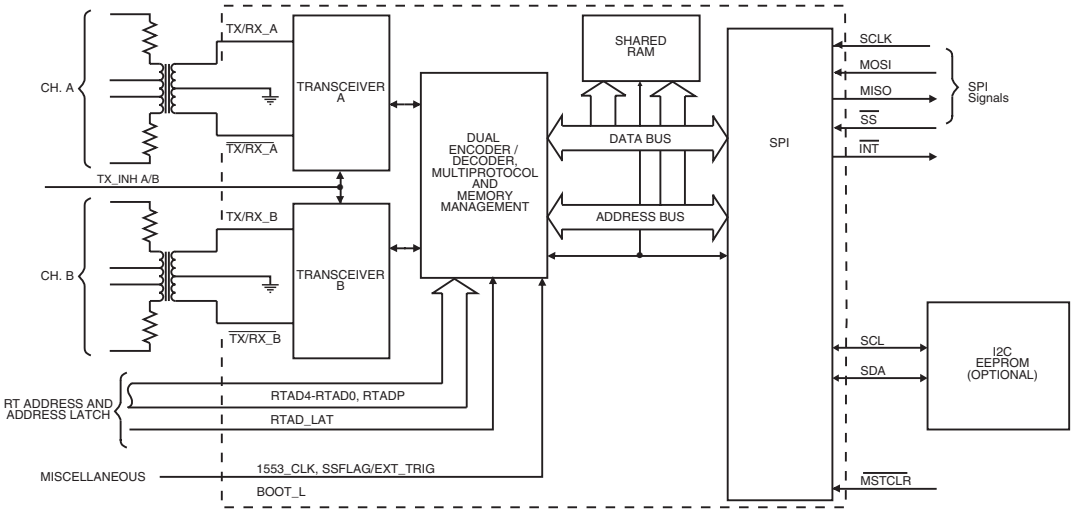
Quick Specs

Current Drain from 3.3V Supply	MIN	TYP	MAX
Idle	-	-	60 mA
25% Duty Cycle	-	-	210 mA
100% Duty Cycle	-	-	660 mA
Power Dissipation	**MIN**	**TYP**	**MAX**
Idle	-	-	0.21 W
25% Duty Cycle	-	-	0.38 W
100% Duty Cycle	-	-	0.90 W

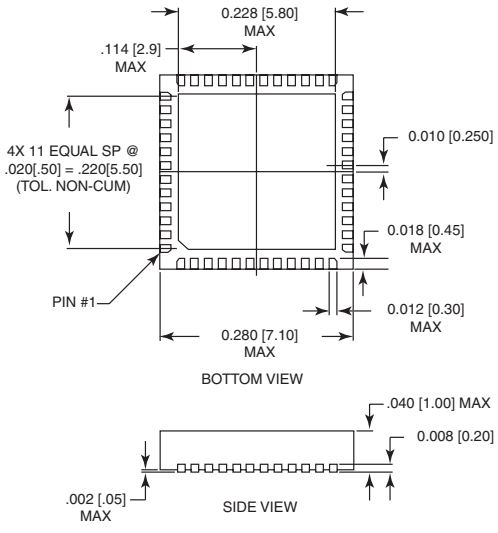
Note: Transmitter is 20 to 27 Vpp

THERMAL	MIN	TYP	MAX
Operating Temperature	-55°C	-	+125°C
Storage Temperature	-65°C	-	+150°C

Block Diagrams



Mechanical Outline



Note: Measurements are in inches [mm]

Ordering Information

BU-67833LC-XXXX

Supplemental Process Requirements:
Blank = None
Other Test Requirements:
2 = MIL-STD-1760 Compliant Amplitude
Process Requirements:
0 = Standard DDC Practices (No Burn-in)
Temperature Range:
1 = -55°c to +125°c
2 = -40°c to +85°c
Transceiver Voltage:
C = 3.3V
Package:
L = Leadless Chip Carrier
Product Type:
67833 = BC/RT/MT with 32K x 17 RAM
67743 = RT Only, With 4K x 16 RAM
67753 = RT/MT With 4K x 17 RAM

DQS Inc.
DATA DEVICE CORPORATION
REGISTERED TO:
AS9100:2016, ISO9001:2015
FILE NO. 10001296

For ordering assistance and technical support,
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