

IceCube
PMT HV Base Board
Engineering Requirements Document (ERD)
Supplement B

Version 0.0

Revisions:

0.0 N. Kitamura March 6, 2003

B1. Scope

This document describes a suggested implementation of the requirements in **Section 3.2.5.3** of PMT HV Base Board Engineering Requirements Document (ERD).

B2. Dependency

This document uses acronyms that are defined in the above ERD.

B3. Suggested Implementation

B3.1 DAC Operation

The DAC shall be operated using CS0, MOSI and SCLK.

B3.2 ADC Operation

The ADC shall be operated using CS1, MISO and SCLK.

B3.3 Board Identification Device

- (a) The board identification device (IDENT) shall be a Dallas Semiconductor DS2401.
- (b) The 1-Wire signal shall be carried by the same wire as MISO.
- (c) The value of CS1 shall remain logic “high” while IDENT is being operated.
- (d) A suggested implementation of IDENT is as shown in **Figure B1**.

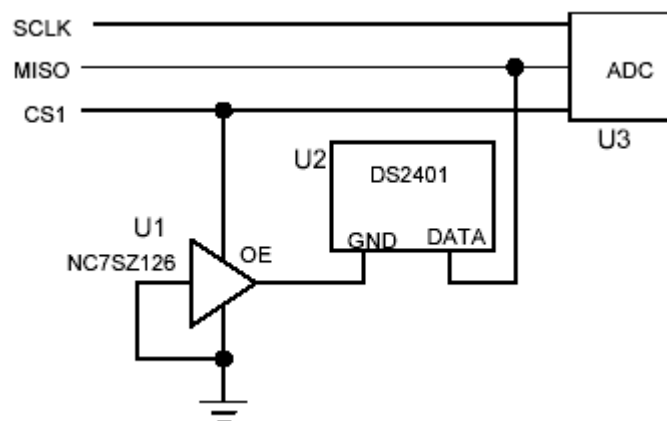


Figure B1 CS1 is connected to OE (output enable) of U1. When CS1 goes low for ADC operation, the output of U1 goes to high-Z, disconnecting U2's GND.