



**Integrated  
Circuit  
Systems, Inc.**

**ICS1700**

**Data Sheet**

## QuickSaver™ Controller For Nickel-Cadmium Batteries

### Features

- A ReFLEX® charging system <sup>(1)</sup>
- Capable of full charge in 20 minutes\*
- Pulsed maintenance mode charge - keeps batteries primed at peak capacity
- Employs sophisticated multiple charge termination methods - as recommended by battery producers
- Reduces internal cell heating
- Reduces internal cell pressure
- LED drivers for charge status, over temperature and some fault conditions
- Multiple charge rate capability
- Microprocessor-based with internal ROM
- Internal safety timer protects against damaging overcharge

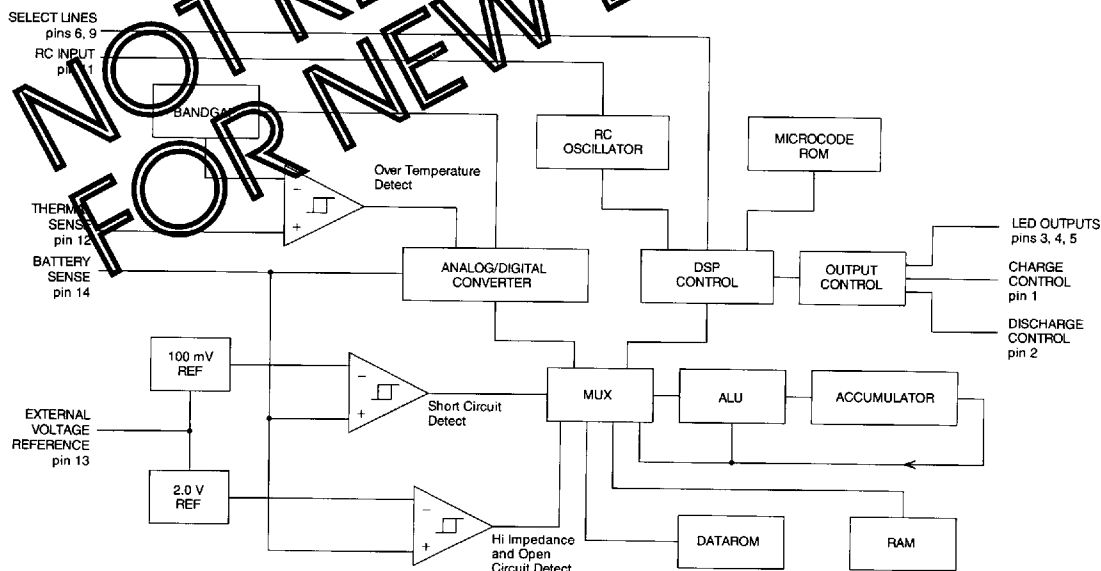
### Applications

- AC or DC powered NiCd Battery Chargers
- Notebook and laptop personal computers
- Portable communications equipment
- Portable video and audio equipment
- Portable point-of-sale equipment
- Portable power tools

### Description

The ICS1700 QuickSaver™ Controller is an LSI device using CMOS technology specifically designed for the intelligent charging of nickel-cadmium batteries. This device uses the patented ReFLEX® principle of charging and time-derivative charge termination (1). The combination of these two methods can allow the safe charging of nickel-cadmium batteries in as little as 20 minutes.\*

### Block Diagram



Pin numbers shown are for DIP package.

\* A 20 minute charge assumes a charging rate of 4C. NOT ALL BATTERIES ARE CAPABLE OF ACCEPTING A 4C CHARGE RATE.  
(1) ReFLEX® is the registered trademark of Christie Electric Corporation.

REV2/25/93