National Semiconductor

Magnetic Bubble Memories
PREVIEW

DS3615 Bubble Memory Function Driver

General Description

The DS3615 is a function driver that converts digital TTL level pulses generated by a timing circuit into the current pulses required by National's NBM2256 256K-bit magnetic bubble memory. The DS3615 consists of input logic gates that are TTL compatible, a D flip-flop, a voltage boost circuit, and six current generators. The current generators deliver constant currents for driving the swap gate, generator element, map gate, and replicator gate of the magnetic bubble memory. Operation is from 0°C to 70°C.

Features

- TTL compatible inputs
- Operates from two standard supplies: +5V, +12V
- PNP inputs minimize loading
- Built-in voltage boost circuitry—does not require an extra voltage supply
- Power up/down glitch-free protection for both supplies

DS3615 Functional Block Diagram