

**LC3516**

c-mos LSI

CIRCUIT DRAWING  
No.4004

2048 WORDS x 8 BITS CMOS STATIC RAM



3011A

The LC3516 is an unlocked high-speed static CMOS static RAM that is organized as 2048 words x 8 bits and operates from a single 5V supply. It has two inputs:  $\overline{CE1}$  input (chip enable input) for high-speed access and  $\overline{CE2}$  input for battery applications where the whole circuit enters the standby mode with less current dissipated. It is especially suited for use in applications where battery-powered operation, battery backup operation as well as high-speed access are required.

**Applications**

- Battery-powered portable set.
- Battery backup nonvolatile memory.

**Features**

- Low standby current.  
 LC3516 : 30 $\mu$ A  
 LC3516L : 1 $\mu$ A(Ta=60°C)
- Single 5V supply :  $V_{CC}=5V\pm 10\%$
- Access time : TAA=250ns max.
- Data hold voltage :  $V_{CC}=2.0$  to 5.5V
- Completely static operation.
- T<sup>2</sup>L compatible at all input/output levels.
- 24-pin standard package.
- Tri-state output

**LC3516D**

c-mos silicon gate LSI

CIRCUIT DRAWING  
No.4004

2048 WORDS x 8 BITS STATIC RAM



3011A

**General Description**

The LC3516D is a nonclocked silicon gate CMOS static RAM organized as 2048 words x 8 bits. It has a complete CMOS circuit configuration. With the current dissipation being low at the data hold mode or standby mode and the operating voltage range being wide, it is especially suited for use in CMOS micro-computers, battery-powered portable systems using a CMOS logic IC, and nonvolatile memories at the battery backup mode.

**Features**

- Wide operating voltage range: 2.6 to 5.5V
- Low standby current: 5 $\mu$ A(max) at Ta=60°C
- Low data hold current: 3 $\mu$ A(max) at  $V_{CC}=3.0V$ , Ta=60°C
- Data hold supply voltage: 2.0 to 5.5V
- No clock required (Complete static memory)
- Common data input and output using 3-state outputs
- 24-pin DIP plastic package
- Pin-out compatible with 2716 EP-ROM
- Two chip enable inputs ( $\overline{CE1}$ ,  $\overline{CE2}$ )
- 16K Static RAM Family
  - LC3516/LC3516L
  - LC3517/LC3517L
  - LC3516D
  - LC3517D