Philips Components

Data sheet	
status	Product specification
date of issue	June 1990

FCB61C65(L/LL)

8 K x 8 Fast CMOS low-power static RAM

FOR DETAILED INFORMATION SEE RELEVANT DATA BOOK OR DATA SHEET

FEATURES

- Operating supply voltage 5 V ± 10%
- Inputs and outputs ESD protected
- Automatic power-down after a completed read access
- Access time: 55 ns and 70 ns
- Low current consumption:
  - active 70 mA max.
  - standby (TTL) 3 mA max.
  - standby (CMOS) 100 µA max. (L-version)
  - standby (CMOS) 1 µA max. (LL-version)
- Suitable for battery back-up operation: (FCB61C65L/LL only)
  - data retention voltage 2 V min.
  - data retention current 50 µA max. (L-version)
  - data retention current 1 µA max. (LL-version)
- Latched data outputs giving stable data between consecutive accesses
- Easy memory expansion
- Common data I/O interface
- All inputs and outputs TTL and CMOS compatible
- All inputs have a Schmitt trigger switching action
- Three-state outputs
- Operating temperature 0 °C to +70 °C

GENERAL DESCRIPTION

The FCB61C65(L/LL) is a 65536-bit fast, low-power, static random access memory organized as 8192 words of 8 bits each.

The chip enable inputs $\overline{CE}1$ and CE2 are available for memory expansion and to control the low-power/ standby mode.

The device operates from a 5 V power supply and has an access time of 55 ns and 70 ns.

The FCB61C65(L/LL) is ideally suited for memory applications where fast access time, low power and ease of use are required.

The FCB61C65(L/LL) is a CMOS device which uses a 6 transistor memory cell.

The IC is fabricated in a CMOS double-metal single-poly process using ion-implanted silicon gate technology.

ORDERING AND PACKAGE INFORMATION

EXTENDED TYPE NUMBER	PACKAGE			
	PINS	PIN POSITION	MATERIAL	CODE
FCB61C65 (L/LL)-XXP	28	DIL (600 mil)	plastic	SOT117
FCB61C65 (L/LL)-XXT	28	SO28XL (330mil)	plastic	SOT213

8 K x 8 Fast CMOS low-power static RAM FCB61C65(L/LL)

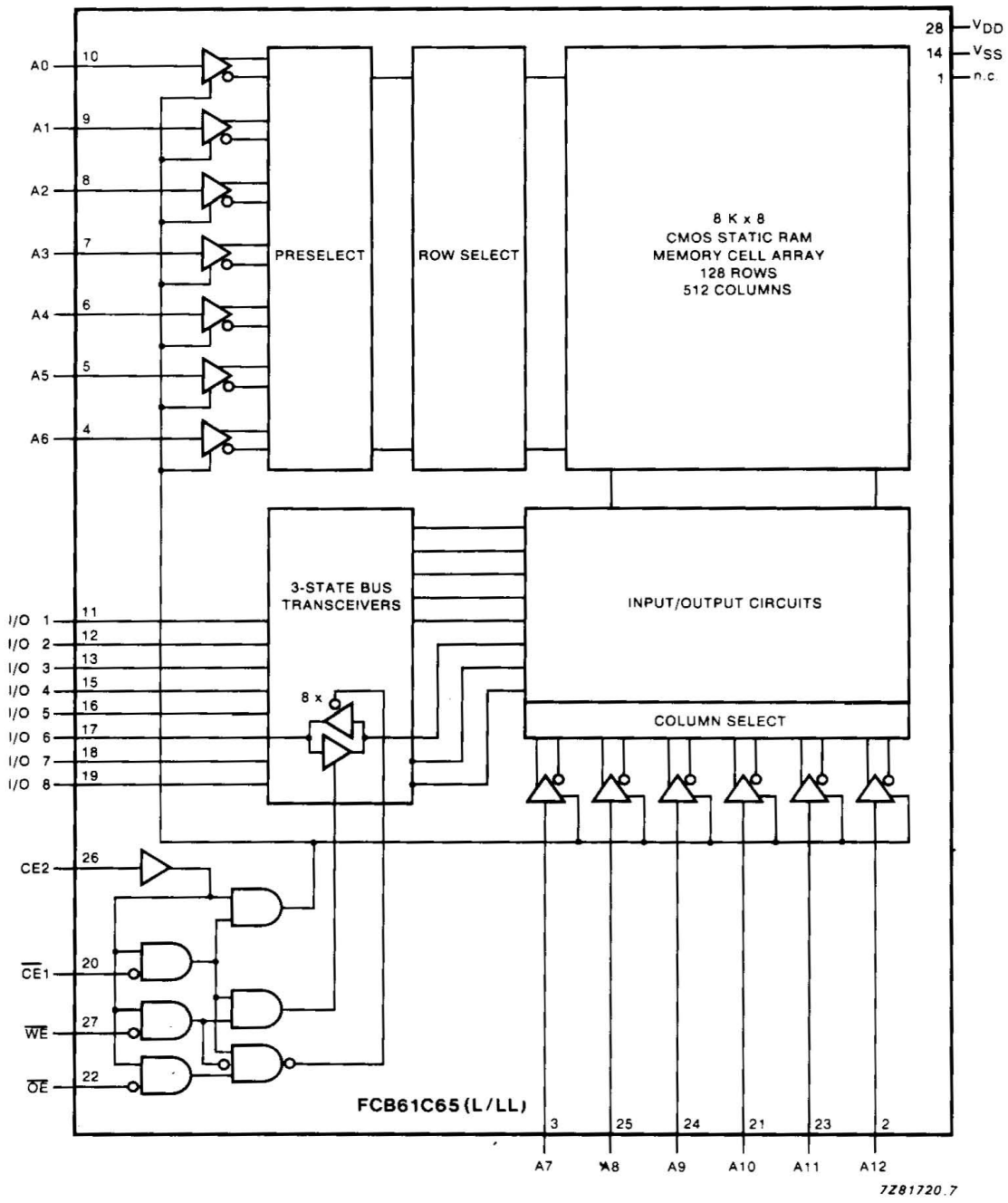

Fig.1 Block diagram.

Philips Components

Data sheet	
status	Product specification
date of issue	August 1990

FCF61C65(L/LL)

8 K x 8 Fast CMOS low-power static RAM for extended temperature range

FOR DETAILED INFORMATION SEE RELEVANT DATA BOOK OR DATA SHEET

FEATURES

- Operating supply voltage 5 V ± 10%
- Inputs and outputs ESD protected
- Automatic power-down after a completed read access
- Access time: 85 ns
- Low current consumption:
  - active 60 mA max.
  - standby (TTL) 3 mA max.
  - standby (CMOS) 200 µA max. (L-version)
  - standby (CMOS) 4 µA max. (LL-version)
- Suitable for battery back-up operation: (FCF61C65L/LL only)
  - data retention voltage 2 V min.
  - data retention current 100 µA max. (L-version)
  - data retention current 4 µA max. (LL-version)
- Latched data outputs giving stable data between consecutive accesses
- Easy memory expansion
- Common data I/O interface
- All input and outputs TTL and CMOS compatible
- All inputs have a Schmitt trigger switching action
- Three-state outputs
- Operating temperature –40 °C to +85 °C

GENERAL DESCRIPTION

The FCF61C65(L/LL) is a 65536-bit, fast, low-power, static random access memory organized as 8192 words of 8 bits each.

The chip enable inputs $\overline{CE}1$ and CE2 are available for memory expansion and to control the lower-power/ standby mode.

The device operates from a 5 V power supply and has an access time of 85 ns.

The FCF61C65(L/LL) is ideally suited for memory applications for the extended temperature range of –40 to +85°C where fast access time, low power and ease of use are required.

The FCF61C65(L/LL) is a full CMOS device using a 6 transistor memory cell.

The IC is fabricated in a CMOS double-metal single-poly process using ion-implanted silicon gate technology.

ORDERING AND PACKAGE INFORMATION

EXTENDED TYPE NUMBER	PACKAGE			
	PINS	PIN POSITION	MATERIAL	CODE
FCF61C65 (L/LL)-85T	28	SO28XL(330mil)	plastic	SOT213

8 K x 8 Fast CMOS low-power static RAM for extended temperature range

FCF61C65(L/LL)

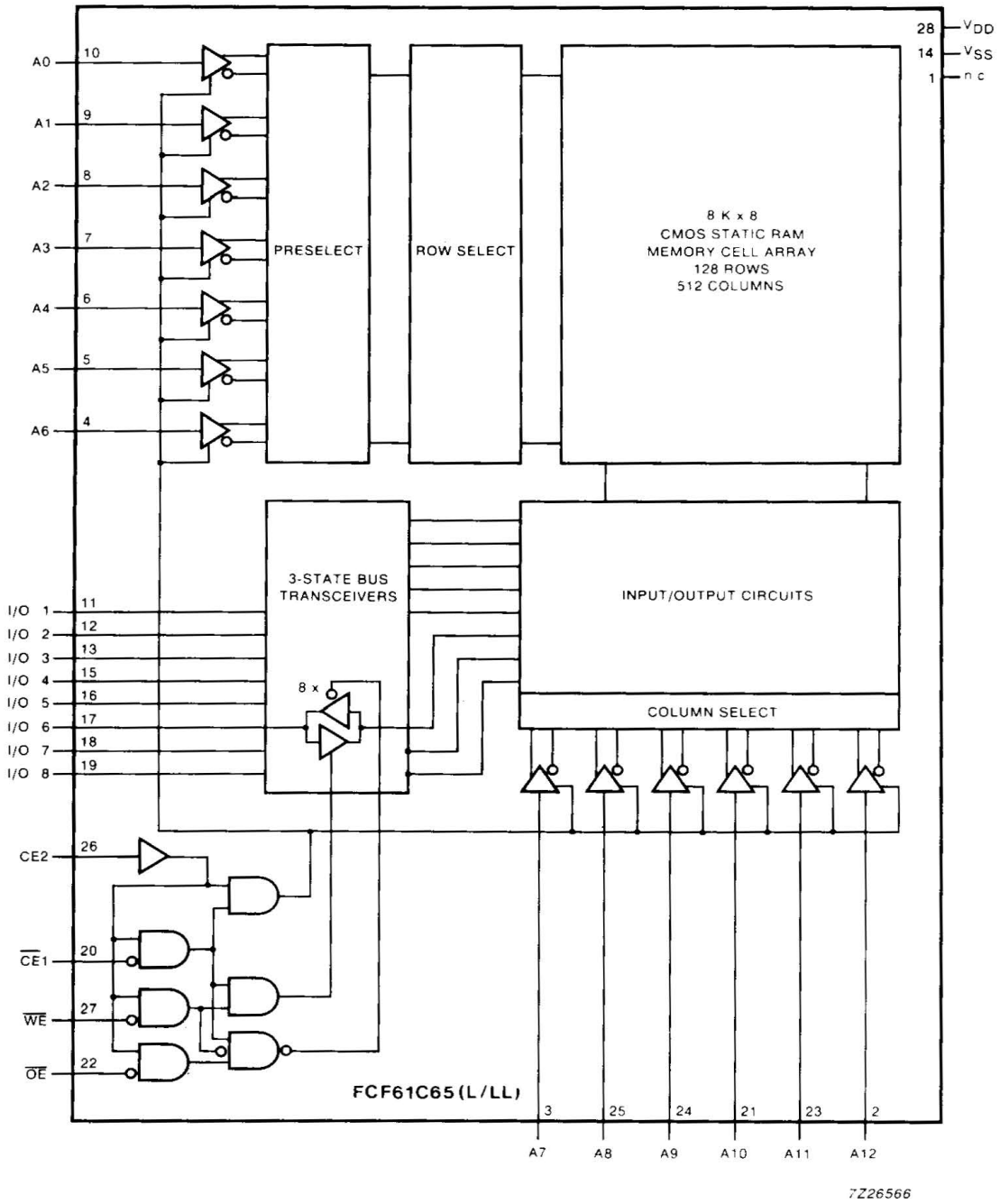

Fig.1 Block diagram.