

# IBM PS/2® MODEL 30-COMPATIBLE FLOPPY DISK CONTROLLER AND DATA SEPARATOR

#### **FEATURES**

- Provides a μPD765A-compatible floppy disk controller
- Contains a precision analog data separator
- Integrates an internal phase comparator, and voltage controlled oscillator (VCO)
- Provides the system with three data rates:
  - -250K bits-per-second
  - -300K bits-per-second
  - -500K bits-per-second

#### DESCRIPTION

The VL82C033/OTI-033 is the Floppy Disk Controller and Data Separator device in the three-chip VLSI/OTI PS/2 Model 30-compatible chip set. the other two devices are the VL82C031/OTI-031 System Controller and the VL82C032/

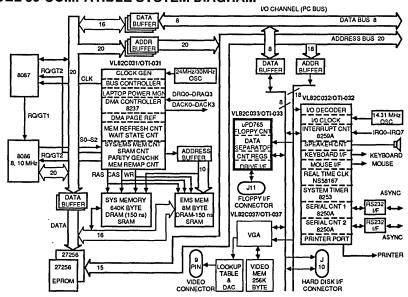
OTI-032 I/O Controller.

The chip set integrates logic and functions on PS/2 Model 30-compatible systems to the point of reducing the printed circuit board device count by half, when memories are excluded. Further, while offering complete compatibility with the PS/2 Model 30compatible system, the VLSI/OTI chip set improves system performance by allowing 10 MHz operation with no "wait states" (using 150 ns DRAMS), supports an additional 8M-bytes of memory using EMS (Expanded Memory Specification) 4.0, and controls system speed as necessary for optimum performance.

A fourth device, the VL82C037/OTI-037 VGA Video Graphics Controller is also used in the PS/2 Model 30-compatible system and provides high resolution graphics of 800 x 600 elements with 256 colors. Graphic capabilities of this resolution are usually found only on more expensive systems.

The VL82C033/OTI-033 provides the PS/2 Model-30 compatible system with a μPD 765A-compatible floppy disk controller function, a precision analog data separator, an internal phase comparator, the required filters, as well as a voltage controlled oscillator (VCO). The VL82C033/OTI-033 provides the system with three floppy disk data rates: 250K bits-per-second, 300K bits-per-second, and 500K bits-per-second. The VL82C033/OTI-033 is available from both VLSI Technology Inc. and Oak Technology, Inc. in an industry-standard plastic 48 pin DIP.

### PS/2 MODEL 30-COMPATIBLE SYSTEM DIAGRAM



#### ORDER INFORMATION

| Part<br>Number | Package     |
|----------------|-------------|
| VL82C033-PC    | Plastic DIP |

## PLEASE CONSULT DATA SHEET FOR DETAILED INFORMATION

Notes: Operating temperature range is 0°C to +70°C. IBM PS/2<sup>®</sup> is a registered trademark of IBM Corp.