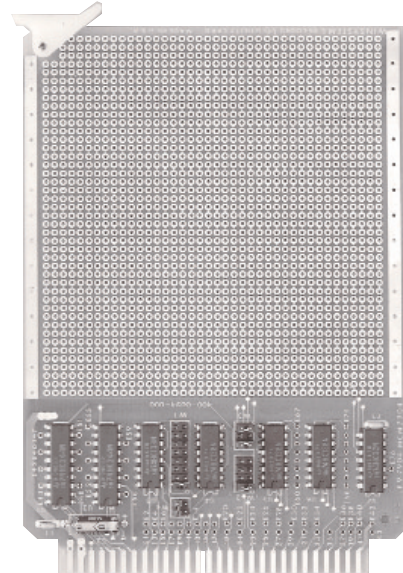


FEATURES

- Access to all STD Bus and CMOS STD Bus lines and power buses
- Decoded addressing
- Data bus buffers with hysteresis
- 8 decoded input and 8 output strobes
- Processor independent
- Large breadboard area on 0.100" grid accepts standard DIP sockets, connectors and press-fit pins in plated through holes
- IOEXP supported
- Single +5V operation
- Replacement for Pro-Log 79C04
- Available for CMOS STD Bus: LPM-7904

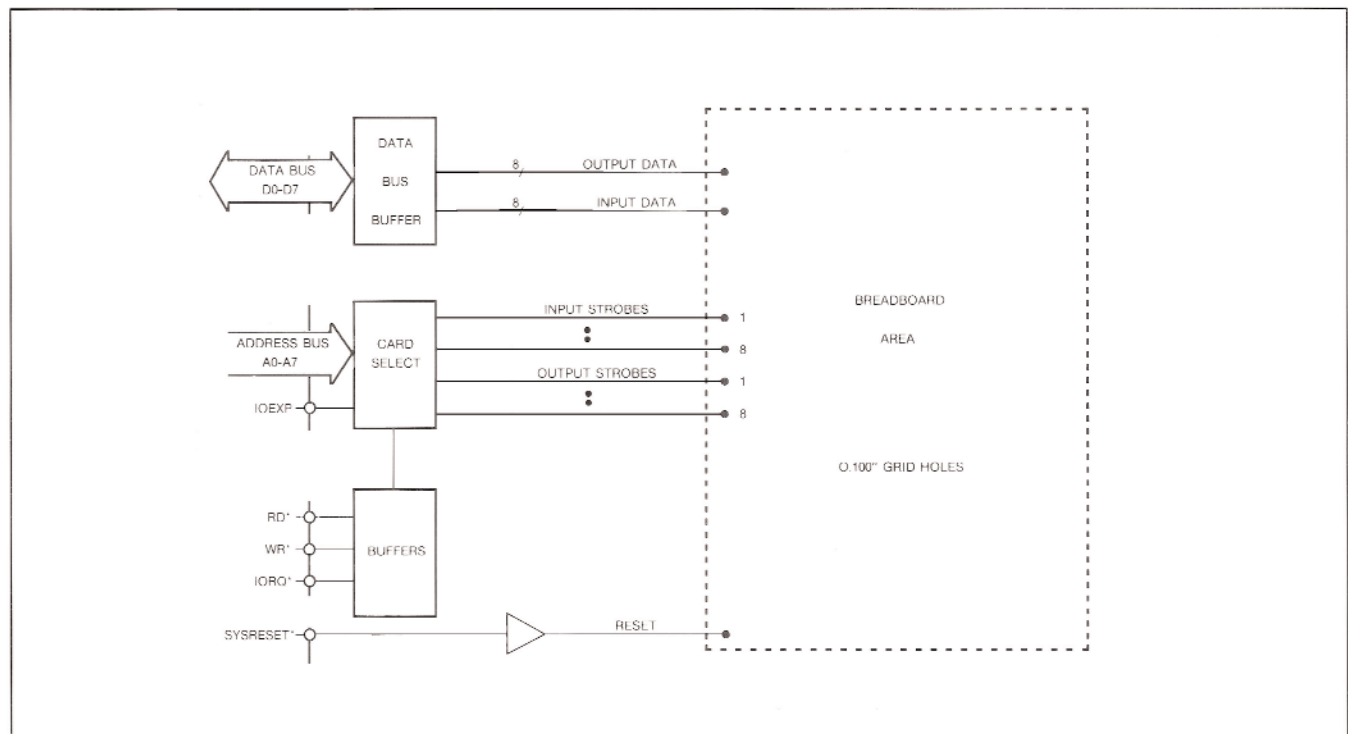
The LPM/MCM-7904 is a card designed for prototyping I/O circuitry. The STD Bus and CMOS STD Bus is decoded with input and output logic and STD Bus and CMOS STD Bus buffering to allow a user to construct experimental and custom I/O interfaces with a minimum of effort. A 0.100 inch grid is provided for the breadboard area that accepts standard DIP sockets, connectors, press-fit pins and discrete logic circuitry.



FUNCTIONAL CAPABILITY

STD Bus Interface - The LPM-7904 is the CMOS STD Bus versions and the MCM-7904 is the STD Bus versions of these cards. The LPM/MCM prefix

indicates the card has the same features and functionality. The differences between the two products are the various power requirements, bus interface levels, and operation temperature ranges.



Full data, address, and control line buffering connection points are provided from the bus to the prototyping circuit area.

LPM/MCM-7904 is a replacement for the Pro-Log 7904 and 79C04 card.

Addressing - The LPM/MCM-7904 is configured for 8-bit I/O memory addressing. A total of 8 contiguous addresses are provided by decoding A0 to A2. IOEXP is available and can be decoded as either active low or don't care. The base address is determined by A3 to A7 and can be located on any jumper selectable even 8-port boundary.

Configuration - Beyond the address decoding circuitry is a prototyping breadboard area. This 4.3" x 3.8" area is available for prototype and experimental circuit design. It consists of a 0.100 inch grid of 0.042 inch plated through holes that will accept 0.025 inch square posts, standard 8, 14, 16, 24, 28, and 40-pin DIP sockets and discrete components. The entire top of the card is available for installation of one or several 0.100" right angle connectors or headers at the edge.

Additionally the signal pads, power pads, and ground pads are labeled on the circuit side of the board for easy identification. All chips are socketed for removal or replacement.

Data Bus - Data bus buffers are provided to interface between the STD Bus and CMOS STD Bus and prototype circuit area. Eight input and output strobes are associated with the buffers to either input or output data from up to 8 different ports on the LPM/MCM-7904 card to the host STD Bus and CMOS STD Bus processor.

Input Strobes - Eight input strobe lines are available to the prototype board area and correspond to 8 sequential read ports. These decoded strobes enable input devices when data is requested by the processor and also turn on the data bus buffers to gate the data onto the STD Bus and CMOS STD Bus. Each strobe is generated when a processor Read is made to the respective port.

Output Strobes - Eight output strobe lines are available to the prototype board area and correspond to 8 sequential write ports. The decoded strobes become active during the processor's I/O port Write cycle. They can be used to latch data from the STD Bus and CMOS STD Bus buffer without any additional gating.

SPECIFICATIONS

Electrical

All STD Bus and CMOS STD Bus processors with I/O mapping are supported

I/O Addressing: Jumper selectable on 8-port boundary

Power Requirements:

LPM-7904: +5V \pm 10% at 50mA (plus user circuitry)
MCM-7904: +5V \pm 5% at 100mA (plus user circuitry)

Mechanical

Meets all STD Bus mechanical specifications

PC Board: FR4 epoxy glass. Solder mask on both sides, screened component legend and plated through holes

Connectors

STD Bus: 56-pin dual 0.125" centers

Jumpers: 0.025" square posts

Environmental

Operating Temperature:

LPM-7904 -40°C to +85°C

MCM-7904 0°C to +65°C

Non-condensing relative humidity: 5% to 95%

ORDERING INFORMATION

LPM-7904 CMOS STD Bus Decoded I/O utility card

MCM-7904 STD Bus Decoded I/O utility card

