

NOTE

The M9202 Unibus jumper also has 0.61 m (2 ft) of Unibus cable.

M920 Unibus Jumper Module

The M920, shown in Figure 1-52, is a double module connected by a short 60-conductor cable. The module connects one Unibus system unit to the next. The printed circuit cards are held rigidly 2.54 cm (1 in) apart by a handle. A single M920 carries all 56 Unibus signals and 14 grounds.

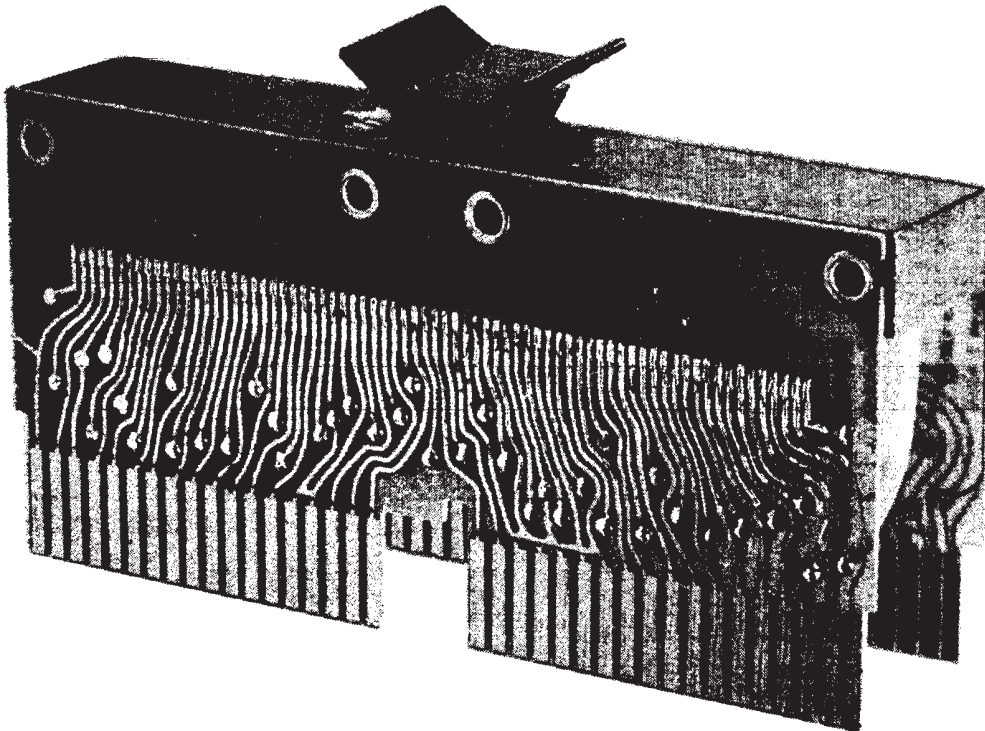


Figure 1-52 M920 Unibus Jumper Module

M9202 Unibus Jumper with Cable

The M9202, shown in Figure 1-53, is a double module connected by 0.61 m (2 ft) of 60-conductor cable. The modules are held rigidly 2.54 cm (1 in) apart by spacers. The flexible ribbon cable is folded between the modules. The M9202 is used in place of M920 to distribute ac loads and separate Unibus segments. The M9202 has the same effect as a BC11A-02.

M930 Unibus Terminator Module

The M930, shown in Figure 1-54, is a short, double-size module that terminates all signal lines on the Unibus. This module provides the signals with termination to prevent reflections. The mod-

ule plugs into a bus-out slot, the slot normally used for adding another Unibus segment.

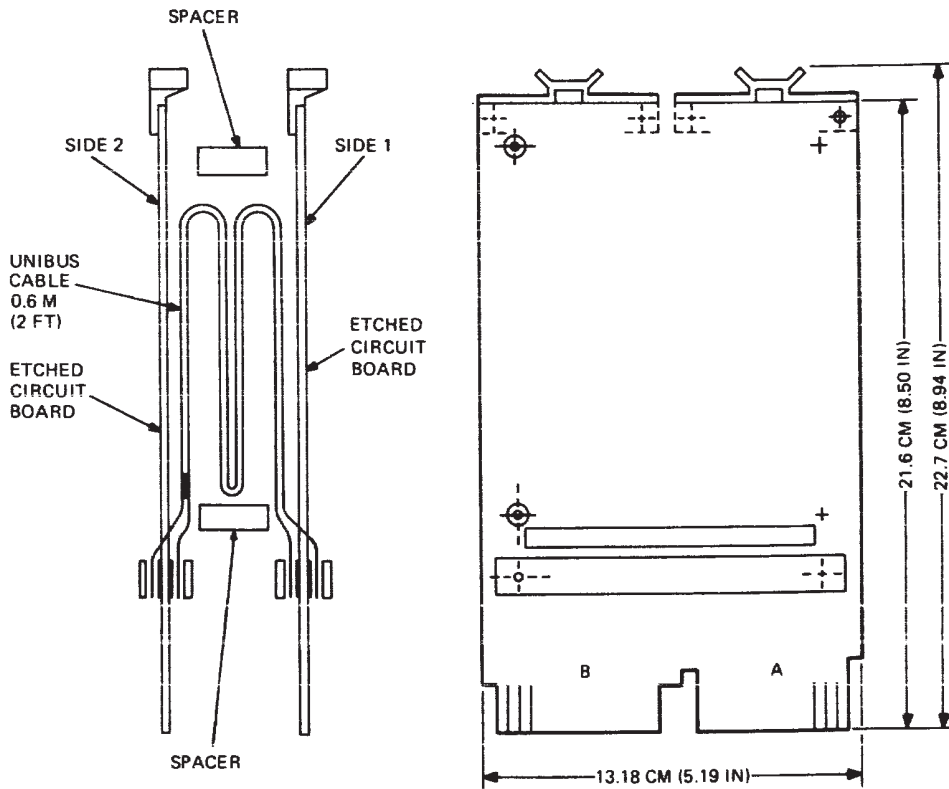


Figure 1-53 M9202 Unibus Jumper with Cable

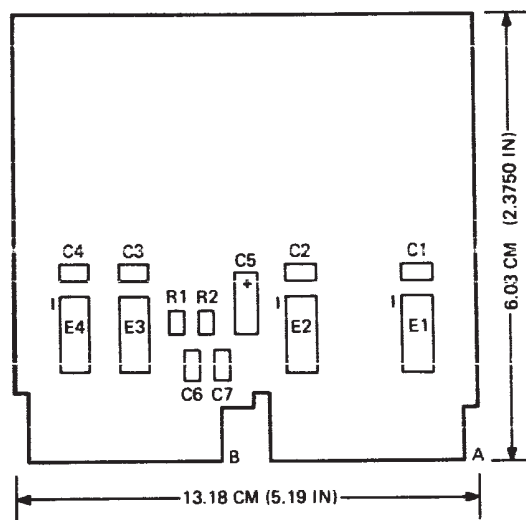


Figure 1-54 M930 Unibus Terminator Module

The module requires 1.25 A at 5 V \pm 5%. All pins have a resistive divider termination of 178 ohms to +5 V and 383 ohms to ground, except those listed in Table 1-5.

Table 1-5
M930 Unibus Terminator Pin Assignment

383 ohms in parallel with 0.001 μ f to +5 V (for AC LO, DC LO)	178 ohms to +5 V (for grant lines)	Ground Pins		+5 V Input Pins
BF1	AV1	AB2	BB2	AA2
BF2	AU1	AC2	BC2	BA2
	BA1	AN1	BD1	
	BB1	AP1	BE1	
	BE2	AR1	BT1	
		AS1	BV2	
		AT1		
		AV2		

NOTE

All other pins have a resistor divider termination of 178 ohms to +5 V and 383 ohms to GND.

M981 Internal Unibus Terminator Assembly

The M891, shown in Figure 1-55, is a double module connected by a short 60-conductor cable. The M981 is effectively an M930 configured on a M920 jumper module for internal termination of the Unibus. The printed circuit cards are held rigidly 2.54 cm (1 in) apart by a handle. Voltage requirements and pin connections are the same as an M930.

NOTE

Other terminator modules are available with bootstrap programs, diagnostic programs, and ROM options. Contact the local DIGITAL sales office for details.

Drivers, Receivers, and Transceivers

The recommended drivers, receivers, and transceivers used to interface with the Unibus cable are listed below.

Function	Type IC	Description	DEC Part No.	DEC Option No.
Receiver	8640	Quad NOR gate	19-11469	DEC 00956
Transceiver	8641	Quad transceiver (transmitter/receiver)	19-11579	DEC 00964
Driver (Transmitter)	8881	Quad NAND gate	19-09705	DEC 00957