



RM 65 DATA SHEET

EXTENDER MODULE

RM 65

The RM 65 product line is designed for OEM and end user microcomputer applications requiring state-of-the-art performance, compact size, modular design and low cost. Software for RM 65 systems can be developed in R6500 Assembly Language, PL/65, BASIC and FORTH. Both BASIC and FORTH are available in ROM and can be incorporated into the user's system.

The RM 65 product line uses a motherboard interconnect concept and accepts any card in any slot. The 64-line RM 65 Bus offers memory addressing up to 128K bytes, high immunity to electrical noise and includes growth provisions for user functions. A selection of card cages provides packaging flexibility. RM 65 products may also be used with Rockwell's AIM 65 Microcomputer for product development and for a broad variety of portable, or desktop microcomputer applications.

ORDERING INFORMATION

The Extender Module is available in an Edge Connector version (RM65-7211) and a Eurocard version (RM65-7211E).

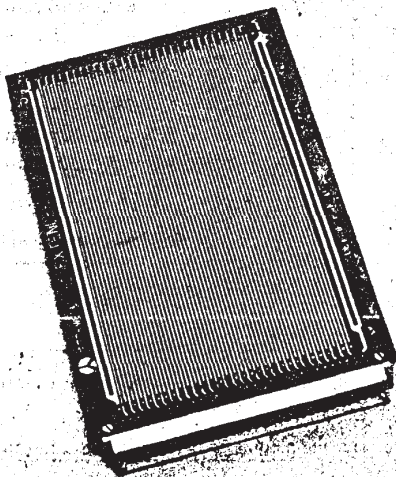
FEATURES

- Extends all RM 65 Bus Lines
- Terminals for GND and +5V
- Edge and Eurocard Connector versions
- Assembled, tested and warranted

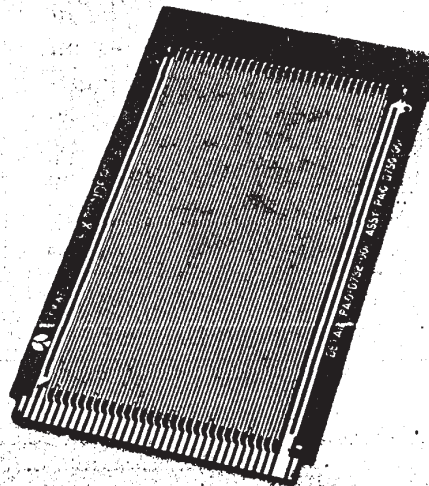
PRODUCT OVERVIEW

The RM 65 Extender Module physically extends a module that is electrically connected to an RM 65 motherboard. This simplifies signal tracing and troubleshooting by providing access to the module outside of its card cage or enclosure.

The RM 65 Extender Module consists of a series of bus lines connecting the RM 65 connector plug on one end, to an RM 65 compatible connector receptacle on the other end. The lines are connected pin-for-pin between the plug and receptacle.



Eurocard Version
RM65-7211E



Edge Connector Version
RM65-7211

RM65
BOARD
PRODUCTS

EXTENDER MODULE

RM 65 Bus Pin Assignments					
Bottom (Solder Side)			Top (Component Side)		
Signal Mnemonic	Signal Name	Pin	Pin	Signal Mnemonic	Signal Name
	Not Connected (See Note)	Wa	Wc		Not Connected (See Note)
+5V	+5 Vdc Line (See Note)	Xa	Xc	+5V	+5 Vdc (See Note)
GND	Ground	1a	1c	+5V	+5 Vdc
BADR/	Buffered Bank Address	2a	2c	BA15/	Buffered Address Bit 15
GND	Ground	3a	3c	BA14/	Buffered Address Bit 14
BA13/	Buffered Address Bit 13	4a	4c	BA12/	Buffered Address Bit 12
BA11/	Buffered Address Bit 11	5a	5c	GND	Ground
BA10/	Buffered Address Bit 10	6a	6c	BA9/	Buffered Address Bit 9
BA8/	Buffered Address Bit 8	7a	7c	BA7/	Buffered Address Bit 7
GND	Ground	8a	8c	BA6/	Buffered Address Bit 6
BA5/	Buffered Address Bit 5	9a	9c	BA4/	Buffered Address Bit 4
BA3/	Buffered Address Bit 3	10a	10c	GND	Ground
BA2/	Buffered Address Bit 2	11a	11c	BA1/	Buffered Address Bit 1
BA0/	Buffered Address Bit 0	12a	12c	B ϕ 1	Buffered Phase 1 Clock
GND	Ground	13a	13c	BSYNC	Buffered Sync
BSO	Buffered Set Overflow	14a	14c	BDRQ1/	Buffered DMA Request 1
BRDY	Buffered Ready	15a	15c	GND	Ground
	User Spare 1	16a	16c	-12V/-V	-12 Vdc/-V
+12V/+V	+12 Vdc/+V	17a	17c		User Spare 2
GND	Ground Line	18a	18c	BFLT/	Buffered Bus Float
BDMT/	Buffered DMA Terminate	19a	19c	B ϕ 0	Buffered External Phase 0 Clock
	User Spare 3	20a	20c	GND	Ground
BR/W/	Buffered Read/Write "Not"	21a	21c	BDRQ2/	Buffered DMA Request 2
	System Spare	22a	22c	BR/W	Buffered Read/Write
GND	Ground	23a	23c	BACT/	Buffered Bus Active
BIRQ/	Buffered Interrupt Request	24a	24c	BNMI/	Buffered Non-Maskable Interrupt
B ϕ 2/	Buffered Phase 2 "Not" Clock	25a	25c	GND	Ground
B ϕ 2	Buffered Phase 2 Clock	26a	26c	BRES/	Buffered Reset
BD7/	Buffered Data Bit 7	27a	27c	BD6/	Buffered Data Bit 6
GND	Ground	28a	28c	BD5/	Buffered Data Bit 5
BD4/	Buffered Data Bit 4	29a	29c	BD3/	Buffered Data Bit 3
BD2/	Buffered Data Bit 2	30a	30c	GND	Ground
BD1/	Buffered Data Bit 1	31a	31c	BD0/	Buffered Data Bit 0
+5V	+5 Vdc	32a	32c	GND	Ground
+5V	+5 Vdc (See Note)	Ya	Yc	+5V	+5 Vdc (See Note)
	Not Connected (See Note)	Za	Zc		Not Connected (See Note)

NOTE

Pins Wa, Wc, Xa, Xc, Ya, Yc, Za and Zc are not used on Eurocard version.

INSTALLATION

1. Turn power off to the RM 65 bus.

CAUTION

Never install or remove modules with power on — it may cause damage to the host system or the modules being connected or disconnected.

2. Remove module to be extended from the RM 65 card cage (if present).

3. Insert the Extender Module in a vacant card slot in the card cage and connect it to the motherboard.

4. Connect the module to be extended to J1 of the Extender Module.

CAUTION

Be sure the extended module is properly supported to prevent damage to the module and/or the Extender Module.

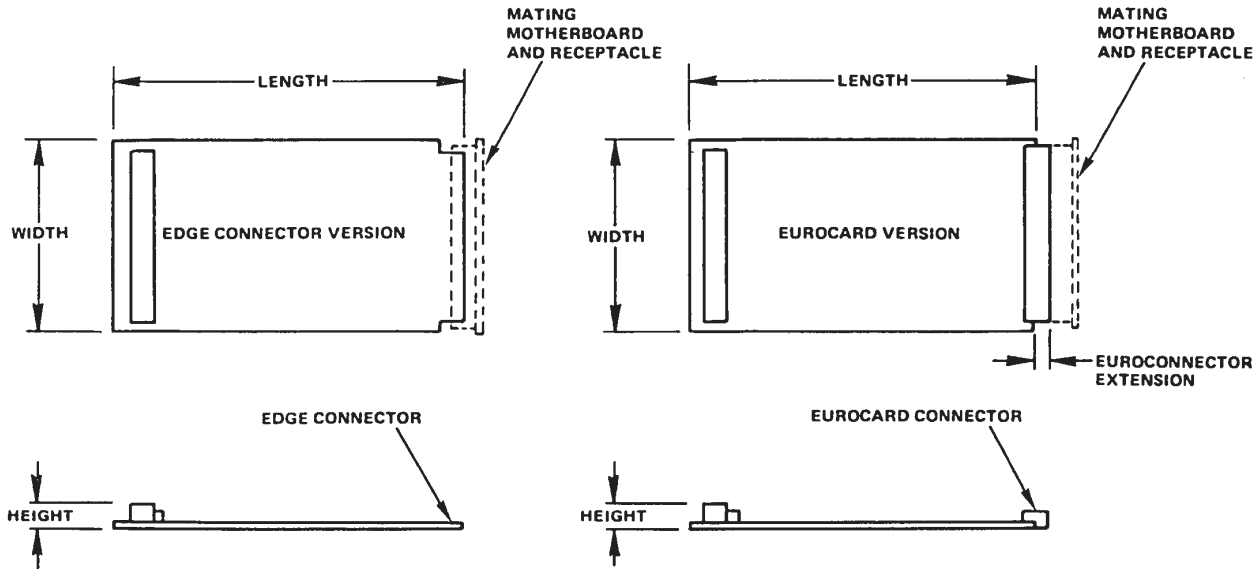
5. Apply power to the RM 65 bus.

Extender Module Physical and Electrical Characteristics

Characteristics	Value	
Physical Characteristics (see Notes)	Edge Connector	Eurocard
	3.9 in. (100 mm)	3.9 in. (100 mm)
	7.3 in. (184 mm)	7.4 in. (187 mm)
	0.56 in. (14 mm)	0.56 in. (14 mm)
	3.2 oz (90 g)	3.2 oz (90 g)
RM 65 Bus Interface:		
Edge Connector	72-pin edge connector (0.100 in. centers)	
Eurocard	64 pin plug (0.100 in. centers) per DIN 41612 (Row b is not used)	
RM 65 Module Interface:		
Edge Connector	72-pin plug (0.100 in. centers)	
Eurocard	64-pin plug (0.100 in. centers) per DIN 41612 (Row b is not used)	

NOTES:

- 1. The height includes the maximum values for component height above the board surface (0.4 in. for populated modules), printed circuit board thickness (0.062 in.), and pin extension through the bottom of the module (0.1 in.).
- 2. The length does not include the added extension due to the module ejector.
- 3. The Eurocard dimensions conform to DIN 41612.



Module Dimensions