



## RM65-7211E RM 65 EXTENDER MODULE

### RM 65 MICROCOMPUTER MODULES

The RM65-7211E Extender Module is one of the hardware options available for the RM 65 Microcomputer Module family.

RM 65 Microcomputer Module products are 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.

RM 65 module products use a motherboard interconnect concept and accept 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 AIM 65 and AIM 65/40 Microcomputers for product development and for a broad variety of portable or desktop microcomputer applications.

### FEATURES

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

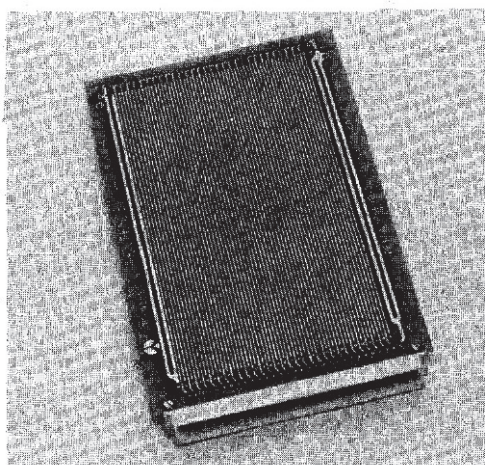
### PRODUCT OVERVIEW

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.

### ORDERING INFORMATION

Part No.	Description
RM65-7211E	Extender Module



RM65-7211E Extender Module

RM 65 Bus Pin Assignments

Bottom (Solder Side)			Top (Component Side)		
Pin	Signal Mnemonic	Signal Name	Pin	Signal Mnemonic	Signal Name
1a	GND	Ground	1c	+5V	+5 Vdc
2a	BADR/	Buffered Bank Address	2c	BA15/	Buffered Address Bit 15
3a	GND	Ground	3c	BA14/	Buffered Address Bit 14
4a	BA13/	Buffered Address Bit 13	4c	BA12/	Buffered Address Bit 12
5a	BA11/	Buffered Address Bit 11	5c	GND	Ground
6a	BA10/	Buffered Address Bit 10	6c	BA9/	Buffered Address Bit 9
7a	BA8/	Buffered Address Bit 8	7c	BA7/	Buffered Address Bit 7
8a	GND	Ground	8c	BA6/	Buffered Address Bit 6
9a	BA5/	Buffered Address Bit 5	9c	BA4/	Buffered Address Bit 4
10a	BA3/	Buffered Address Bit 3	10c	GND	Ground
11a	BA2/	Buffered Address Bit 2	11c	BA1/	Buffered Address Bit 1
12a	BA0/	Buffered Address Bit 0	12c	Bφ1	Buffered Phase 1 Clock
13a	GND	Ground	13c	BSYNC	Buffered Sync
14a	BSO	Buffered Set Overflow	14c	BDRQ1/	Buffered DMA Request 1
15a	BRDY	Buffered Ready	15c	GND	Ground
16a		User Spare 1	16c	-12V/-V	-12 Vdc/-V
17a	+12V/+V	+12 Vdc/+V	17c		User Spare 2
18a	GND	Ground Line	18c	BFLT/	Buffered Bus Float
19a	BDMT/	Buffered DMA Terminate	19c	Bφ0	Buffered External Phase 0 Clock
20a		User Spare 3	20c	GND	Ground
21a	BRW/	Buffered Read/Write "Not"	21c	BDRQ2/	Buffered DMA Request 2
22a		System Spare	22c	BRW/	Buffered Read/Write
23a	GND	Ground	23c	BACT/	Buffered Bus Active
24a	BIRQ/	Buffered Interrupt Request	24c	BNMI/	Buffered Non-Maskable Interrupt
25a	Bφ2/	Buffered Phase 2 "Not" Clock	25c	GND	Ground
26a	Bφ2	Buffered Phase 2 Clock	26c	BRES/	Buffered Reset
27a	BD7/	Buffered Data Bit 7	27c	BD6/	Buffered Data Bit 6
28a	GND	Ground	28c	BD5/	Buffered Data Bit 5
29a	BD4/	Buffered Data Bit 4	29c	BD3/	Buffered Data Bit 3
30a	BD2/	Buffered Data Bit 2	30c	GND	Ground
31a	BD1/	Buffered Data Bit 1	31c	BD0/	Buffered Data Bit 0
32a	+5V	+5 Vdc	32c	GND	Ground

## INSTALLATION

Before installing the module, inspect for damage and grease, dirt, liquid or other foreign materials that will affect performance.

- 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.

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

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

- 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.

- Apply power to the RM 65 bus.

## SPECIFICATIONS

Parameter	Value
<b>Dimensions (1, 2, 3)</b>	
Width	3.9 in. (100 mm)
Length	7.4 in. (187 mm)
Height	0.56 in. (14 mm)
<b>Weight</b>	3.2 oz. (90 g)
<b>Interface Connectors</b>	
RM 65 Bus	64-pin plug (0.100 in. centers) per DIN 41612 (Row b is not used)
RM 65 Module	64-pin plug (0.100 in. centers) per DIN 41612 (Row b is not used)
Notes: 1. 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. Length does not include the added extension due to the module ejector. 3. Dimensions conform to DIN 41612.	

