

Real-Time Emulator MODEL 64210A Motorola® 6800/6802/6808 OPTION 212 OPTION 213

TECHNICAL DATA 1 OCT 81



Description

Model 64210A Option 212 and Option 213 Emulators provide functionally transparent, real-time emulation of the Motorola 6800 and 6802/6808 microprocessors. Each emulator consists of an emulation control board and emulator pod assembly. High-speed emulation memory, which is ordered separately, allows emulation of the processor at specified speeds without insertion of wait states. The 64210A Emulation System is compatible with target systems using processors that meet specifications of Motorola 6800 (Option 212) and Motorola 6802/6808 (Option 213).

Features

Software control of host/target system memory mapping.

Map in 1k-byte blocks over 64k-byte address space

Designate blocks as RAM, ROM, or illegal memory

Symbolic debugging capability with both assembly language and Pascal programs.

Real-time emulation without wait states at specified speeds.

Simulated I/O for emulator access to HP 64000 system resources: disc files, printer, development station keyboard and display, and RS-232-C port.

Fast downloading of programs into emulation and/or target system memory.

Powerful logic analysis for complex program tracing.

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Characteristics

ELECTRICAL, OPTION 212

Maximum Clock Speeds: 2 MHz with all memory assigned to target system; 1.9 MHz with any memory assigned to emulation memory, using min. phase 2 pulse width (min. PW Ø2H) = 295 ns. Refer to emulation manual supplement for more details.

Emulation Pod to Target System Interface: low power Schottky TTL levels with capacitance of

low power Schottky TTL levels with capacitance of approx 20 pF, except clock inputs which meet Motorola 6800 specifications plus capacitance of approx 20 pF.

ELECTRICAL, OPTION 213

Maximum Clock Speeds: 2 MHz with all memory assigned to target system; 1.4 MHz with any memory assigned to emulation memory. With wait states, inserted, 2 MHz. (Wait states inserted only when accessing emulation memory). Refer to emulation manual supplement for further details.

Emulation Pod to Target System Interface: low power Schottky TTL levels with capacitance of approx 20 pF, except clock inputs which meet Motorola 6802/08 specifications plus capacitance of approx 20 pF.

PHYSICAL

Cable Length: development station to emulation pod, approx 1.5 m (5 ft); emulation pod to target system interface, approx 0.3 m (1 ft).

ENVIRONMENTAL

Temperature: operating, 0° to 40° C (+32° to +104° F); nonoperating, -40° to +75° C (-40° to +167° F); operating survival, -20° to +50° C (-4° to +122° F).

Altitude: operating, 4600 m (15 000 ft); nonoperating, 15 300 m (50 000 ft). **Relative Humidity:** 5% to 80%.



Ordering Information

FACTORY INSTALLED	
Model 64001S Logic Development System	
Option 212: 6800 Emulation System and Assembler	\$3000
Option 213: 6802/6808 Emulation System and Assembler	\$3100
Option 151: 64k Byte Emulation Memory System	\$6400
Option 152: 32k Byte Emulation Memory System	\$3400
Option 153: 16k Byte Emulation Memory System	
Option 154: 8k Byte Emulation Memory System	\$1600
Option 300: Logic Analyzer	
Option 811: 6800/6802/6808 Pascal/64000 Compiler	Quote
Option 841: 6800/6802/6808 Assembler/Linker/Emulation Software	
Model 64005S Emulation Terminal System	,
Option 212: 6800 Emulation System with Terminal/Emulation Software	\$3000
Option 213: 6802/6808 Emulation System with Terminal/Emulation Software	\$3100
Option 151: 64k Byte Emulation Memory System	\$6400
Option 152: 32k Byte Emulation Memory System	\$3400
Option 153: 16k Byte Emulation Memory System	\$2300
Option 154: 8k Byte Emulation Memory System	
Option 300: Logic Analyzer	\$1800
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USER INSTALLED	
Model 64210A 6800 Family Emulation System	
Option 212: 6800 Emulation System and Assembler	\$3000
Option 213: 6802/6808 Emulation System and Assembler	\$3100
Option 215: 6800 Emulation System without Software	
Option 218: 6802/6808 Emulation System without Software	Quote
Model 64211A 6800/6802/6808 Emulator Control Board	\$1100
Model 64212A 6800 Emulator Pod	
Model 64213A 6802/6808 Emulator Pod	\$1500
Model 64150A Emulation Memory System	
Option 151: 64k Byte Emulation Memory System	\$6475
Option 152: 32k Byte Emulation Memory System	
Option 153: 16k Byte Emulation Memory System	\$2350
Option 154: 8k Byte Emulation Memory System	
Model 64300A Logic Analyzer	
Model 64811A 6800/6802/6808 Pascal/64000 Compiler	Quote
Model 64841B 6800/6802/6808 Assembler/Linker/Emulation Software	

Your HP Field Engineer can help you determine the best configuration to meet your needs.

Prices apply only to domestic U.S. customers.