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M68CPA08W1628T20 Programming Adapter

User's Manual

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User's Manual — M68CPA08W1628T20 Programming Adapter

M68CPA08W1628T20 Quick Start Guide

The M68CPA08W1628T20 is a low-cost universal programmer for HC08 family MCUs. It is designed to work with programmers that use a 16-pin MON08 interface. It supports 7.5mm SOIC packages up to 28 pins, 5.3mm SOIC packages up to 16 pins and TSSOP packages up to 20 pins. If you wish to program TSSOP devices you must purchase and install socket U3 (Yamaichi part number IC51-0202-779).
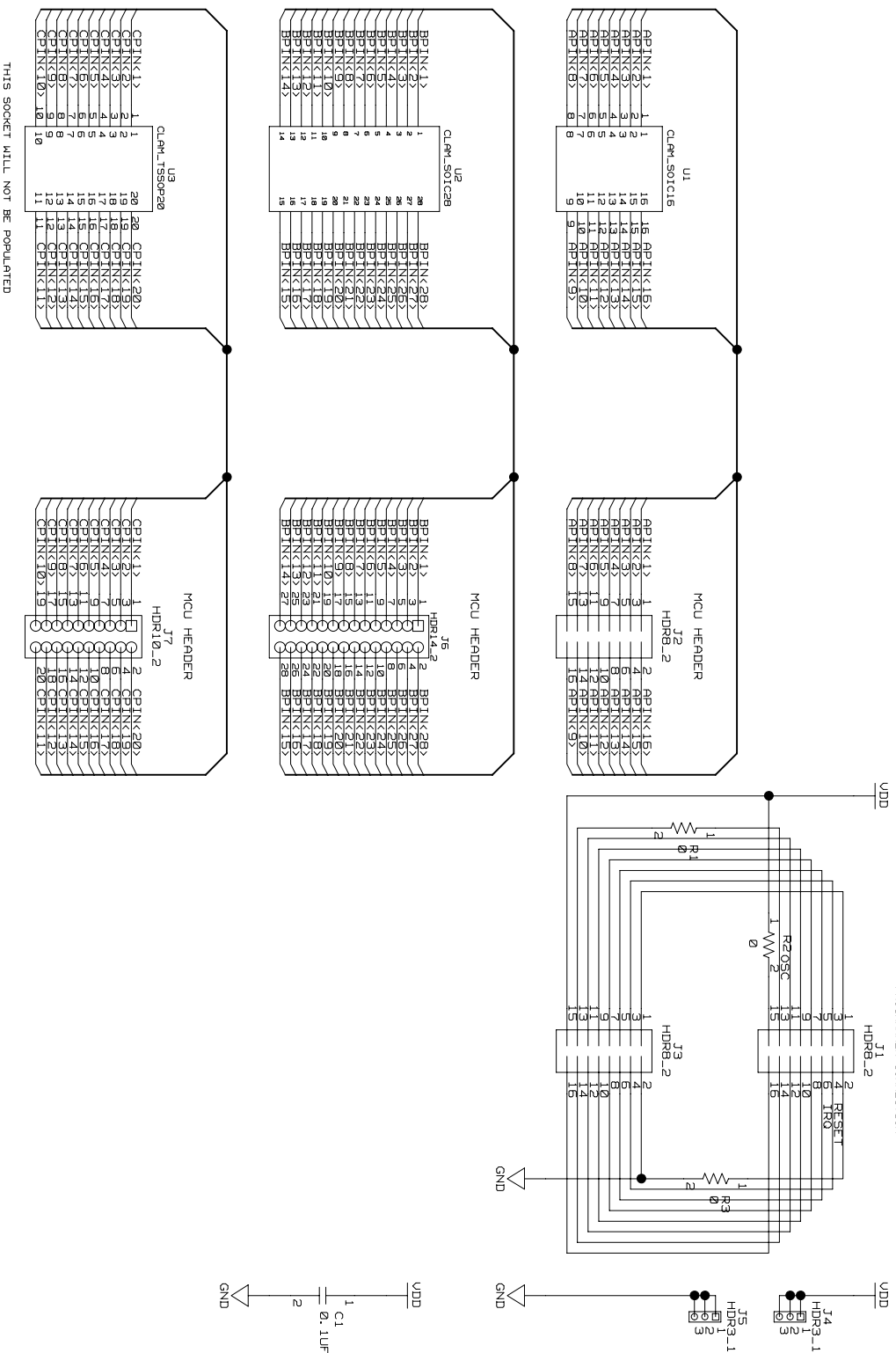
1 - Connect wire jumpers

MON08 connector J3 has the same pin signals as connector J1. You must connect up to 16 supplied jumpers from J3 to J2 for 5.3mm SOIC devices, from J3 to J7 for TSSOP devices or from J3 to J6 for 7.5mm SOIC devices. These jumpers provide power and programming signals to the MCU. Connections will vary depending on the specific device you are using. Refer to the device data sheet and the programer documentation for connection information.

2 - Insert a device to be programmed

Be sure that power is removed before inserting a device. Socket U1 is used for 5.3mm SOIC devices, socket U3 for TSSOP devices or socket U2 for 7.5mm SOIC devices. Open the desired socket and insert device. You should not use force when closing the socket lid. Close the socket latch to secure the device.

3 - Connect the MON08 programmer and program the device

Connect a MON08 programmer to connector J1 of the programming adapter board. Be sure to verify that pin one of the programmer connects to pin one of connector J1. You may now use the programmer to program the inserted device. Refer to your programmer documentation for further operating instructions. Once the programmer indicates that the device has been properly programmed you may open the socket and remove the device.

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NXP

THIS SOCKET WILL NOT BE POPULATED

U3
CLAM_TSSOP20

U2
CLAM_SOIC28

U1
CLAM_SOIC16

J7
HDR10_2
MCU HEADER

J6
HDR14_2
MCU HEADER

J2
HDR8_2
MCU HEADER

VDD

R1
0

R2 OSC
0

J3
HDR8_2

J1
HDR8_2

PROGRAMMER CONNECTION

MON08 HEADERS

RESET
IRQ

GND

R3
0

GND

C1
0.1UF

VDD

GND

J5
HDR3_1

J4
HDR3_1

VDD

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BILL OF MATERIALS - DRAWING NO. 01A11136B REV O   for PWB P/N RE11136B   contained in MPN: M68CPA08W1628T20

ITEM	QTY	REF DES	JEDEC	DESCRIPTION	MFGR	PART NUMBER
1	1	C1	C300_CKR23	CAP CER 0.1uF 50V 20% Z5U TH	Kemet	C410C104M5U5CA
2	1	J1	HDR208_4W	HDR 2X8 TH 100mil CTR 330H Au SHRD	Samtec	TST-108-01-S-D
3	2	J2,J3	HDR208	HDR 2X8 TH 100mil CTR 330H Au	Samtec	TSW-108-07-G-D
4	2	J4,J5	HDR103	HDR 1X3 TH 100mil SP 330H Au	BERG	68001-603
5	1	J6	HDR214	HDR 2X14 TH 100mil CTR 330H Au	SAMTEC	TSW-114-07-S-D
6	1	J7	HDR210	HDR 2X10 TH 100mil CTR 330H Au	SAMTEC	TSW-110-07-S-D
7	3	R1-R3	R600_MF50	RES TF 0 Ohm 1/4w 5%	Yageo/DigiKey	ZOR-25-R/0.0QTR-ND
8	1	U1	SOIC16_PSOC_YAM	SKT CLAMSHELL SOIC 5.3mm 16 PINS	YAMAICHI	IC51-0162-902-2
9	1	U2	SOIC28_PSOC_YAM	SKT CLAMSHELL SOIC 7.5mm 28 PINS	YAMAICHI	IC51-0282-334-1
10	1	N/A	N/A	assembly ID / REV label	vendor	
11	1	N/A	N/A	SN / BC lbl	vendor	
12	1	N/A	N/A	PCB	Electronic Interconnect Corp	RE11136F REV O
13	5	N/A	N/A	RUBBER FEET	3M	SJ5003BLACK

UNPOPULATED COMPONENTS

1	0	U3	TSSOP20_PSOC_YA M	SKT CLAMSHELL TSSOP 4.4mm 20 PINS	YAMAICHI	IC51-0202-779

NOTES:

Numbered Notes on the this BOM correspond to the numbered notes that are documented on Assembly Drawing 01A11136A

A Long lead time part. Needs to have an alternate part identified and procured.

B Alternate suppliers are approved for passive components which are equivalent in fit, form and function.

Motorola / Metrowerks

B11136.XLS

Approval Date: 12/10/02

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