nohau
Cut Your Development Time !

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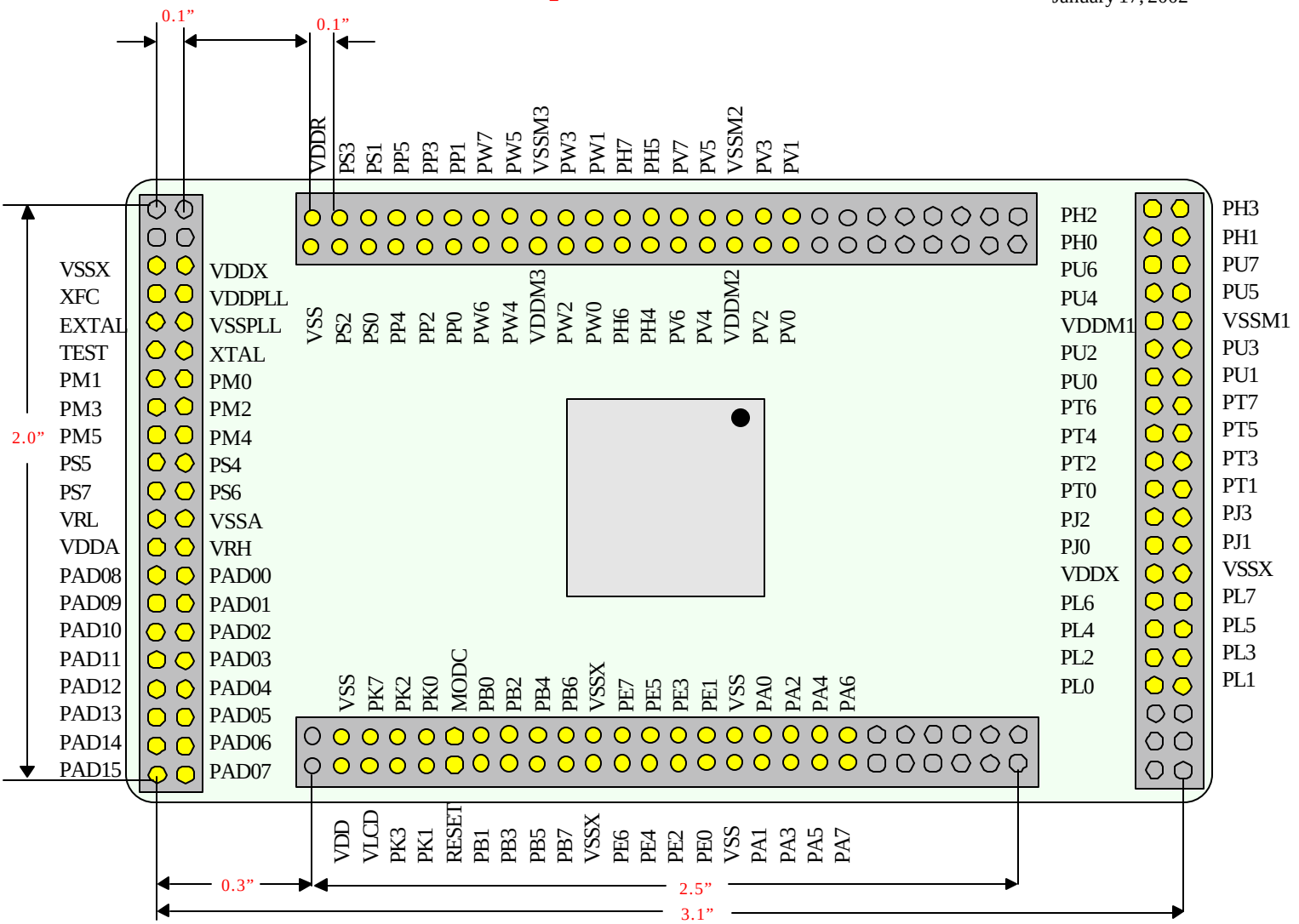
HCS12 - H256 Layout
This is the top view looking down onto the target board or on top of the H256 personality card.

Top View - H256

Version 3.0
January 17, 2002



1) The grayed out pins are not connected. They are physically located on the bottom of the emulator board but are not used on the personality card. They are for future expansion.

2) The target microcontroller needs to be removed from the target since the HC12 family cannot tri-state.

3) The target adapters do not plug into the top of the emulator, they plug in on the bottom side.

Helpful measurements when laying out the board:

On the top side, the emulator expands 2.5”.
O n the bottom side, the emulator expands 4.3”.
On the left side the emulator expands 0.3”.
On the right side the emulator expands 0.6”.

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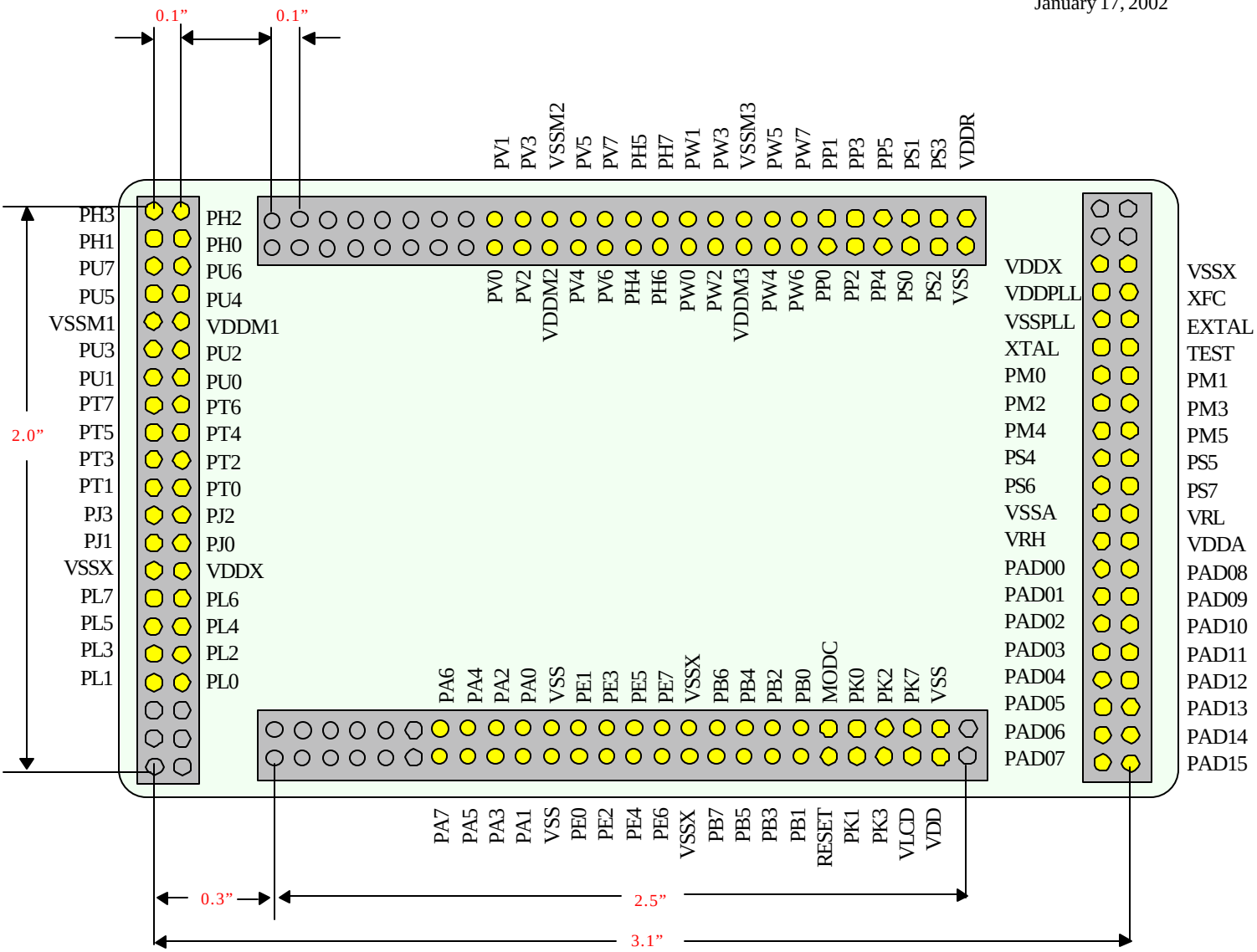
HCS12 - H256 Layout

This is the view looking at the bottom of the H256 emulator.

Bottom View - H256

Version 3.0
January 17, 2002



1) The grayed out pins are not connected. They are physically located on the bottom of the emulator board but are not used on the personality card. They are for future expansion.

2) The target microcontroller needs to be removed from the target since the HC12 family cannot tri-state.

3) The target adapters do not plug into the top of the emulator, they plug in on the bottom side.

HCS12 H256 Pinouts

These are all the pin assignments for the H256 with the alternate names, if applicable.

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Version 2.0
January 17, 2002

Pin 1	M0C0M/PU0
Pin 2	M0C0P/PU1
Pin 3	M0C1M/PU2
Pin 4	M0C1P/PU3
Pin 5	VDDM1
Pin 6	VSSM1
Pin 7	M1C0M/PU4
Pin 8	M1C0P/PU5
Pin 9	M1C1M/PU6
Pin 10	M1C1P/PU7
Pin 11	**KWH0/PH0**
Pin 12	**KWH1/PH1**
Pin 13	**KWH2/PH2**
Pin 14	**KWH3/PH3**
Pin 15	M2C0M/PV0
Pin 16	M2C0P/PV1
Pin 17	M2C1M/PV2
Pin 18	M2C1P/PV3
Pin 19	VDDM2
Pin 20	VSSM2
Pin 21	M3C0M/PV4
Pin 22	M3C0P/PV5
Pin 23	M3C1M/PV6
Pin 24	M3C1P/PV7
Pin 25	KWH4/PH4
Pin 26	KWH5/PH5
Pin 27	KWH6/PH6
Pin 28	KWH7/PH7
Pin 29	M4C0M/PW0
Pin 30	M4C0P/PW1
Pin 31	M4C1M/PW2
Pin 32	M4C1P/PW3
Pin 33	VDDM3
Pin 34	VSSM3
Pin 35	M5C0M/PW4
Pin 36	M5C0P/PW5
Pin 37	M5C1M/PW6
Pin 38	M5C1P/PW7
Pin 39	PWM0/PP0
Pin 40	PWM1/PP1
Pin 41	**PWM2/PP2**
Pin 42	**PWM3/PP3**
Pin 43	**PWM4/PP4**
Pin 44	**PWM5/PP5**
Pin 45	RXD0/PS0
Pin 46	TXD0/PS1
Pin 47	**RXD1/PS2**
Pin 48	**TXD1/PS3**
Pin 49	VSS2
Pin 50	VDDR
Pin 51	VDDX2
Pin 52	VSSX2
Pin 53	M0DC/$\overline{\text{TAGHI}}$/BKGD
Pin 54	$\overline{\text{RESET}}$
Pin 55	VDDPLL
Pin 56	XFC
Pin 57	VSSPLL
Pin 58	EXTAL
Pin 59	XTAL
Pin 60	TEST
Pin 61	**SDA/PM0**
Pin 62	**SCL/PM1**
Pin 63	RXCAN0/PM2
Pin 64	TXCAN0/PM3
Pin 65	RXCAN1/PM4
Pin 66	TXCAN1/PM5
Pin 67	MODA/IPIE0/PE5
Pin 68	MISO/PS4
Pin 69	MOSI/PS5
Pin 70	SCK/PS6
Pin 71	$\overline{\text{SS}}$/PS7
Pin 72	$\overline{\text{IRQ}}$/PE1
Pin 73	PE6/IPIPE1/MODB
Pin 74	PE4/ECLK
Pin 75	PE0/$\overline{\text{XIRQ}}$
Pin 76	VSSA
Pin 77	VRL
Pin 78	VRH
Pin 79	VDDA
Pin 80	PAD00/AN00
Pin 81	**PAD08/AN08**
Pin 82	PAD01/AN01
Pin 83	**PAD09/AN09**
Pin 84	PAD02/AN02
Pin 85	**PAD10/AN10**
Pin 86	PAD03/AN03
Pin 87	**PAD11/AN11**
Pin 88	PAD04/AN04
Pin 89	**PAD12/AN12**
Pin 90	PAD05/AN05
Pin 91	**PAD13/AN13**
Pin 92	PAD06/AN06
Pin 93	**PAD14/AN14**
Pin 94	PAD07/AN07
Pin 95	**PAD15/AN15**
Pin 96	VDD1
Pin 97	VSS1
Pin 98	VLCD
Pin 99	PK3/XADDR17/BP3
Pin 100	PK2/XADDR16/BP2
Pin 101	PK1/XADDR15/BP1
Pin 102	PK0/XADDR14/BP0
Pin 103	PB0/ADDR0/DATA0/FP0
Pin 104	PB1/ADDR1/DATA1/FP1
Pin 105	PB2/ADDR2/DATA2/FP2
Pin 106	PB3/ADDR3/DATA3/FP3
Pin 107	PB4/ADDR4/DATA4/FP4
Pin 108	PB5/ADDR5/DATA5/FP5
Pin 109	PB6/ADDR6/DATA6/FP6
Pin 110	PB7/ADDR7/DATA7/FP7
Pin 111	PA0/ADDR8/DATA8/FP8
Pin 112	PA1/ADDR9/DATA9/FP9
Pin 113	PA2/ADDR10/DATA10/FP10
Pin 114	PA3/ADDR11/DATA11/FP11
Pin 115	PA4/ADDR12/DATA12/FP12
Pin 116	PA5/ADDR13/DATA13/FP13
Pin 117	PA6/ADDR14/DATA14/FP14
Pin 118	PA7/ADDR15/DATA15/FP15
Pin 119	PL0/FP16
Pin 120	PL1/FP17
Pin 121	PL2/FP18
Pin 122	PL3/FP19
Pin 123	**PL4/FP28**
Pin 124	**PL5/FP29**
Pin 125	**PL6/FP30**
Pin 126	**PL7/FP31**
Pin 127	PE2/R/$\overline{\text{W}}$/FP20
Pin 128	PE3/$\overline{\text{LSTRB}}$/TAGLO/FP21
Pin 129	PE7/$\overline{\text{NOACC}}$/XCLKS/FP22
Pin 130	PK7/$\overline{\text{ECS}}$/ROMONE/FP23
Pin 131	VDDX1
Pin 132	VSSX1
Pin 133	**PJ0/KWJ0**
Pin 134	**PJ1/KWJ1**
Pin 135	**PJ2/KWJ2**
Pin 136	**PJ3/KWJ3**
Pin 137	PT0/IOC0/FP24
Pin 138	PT1/IOC1/FP25
Pin 139	PT2/IOC2/FP26
Pin 140	PT3/IOC3/FP27
Pin 141	PT4/IOC4
Pin 142	PT5/IOC5
Pin 143	PT6/IOC6
Pin 144	PT7/IOC7

Note: These pinouts are for the 144-pin version of the device. The pins shown in bold are not available on the 112-pin version.