

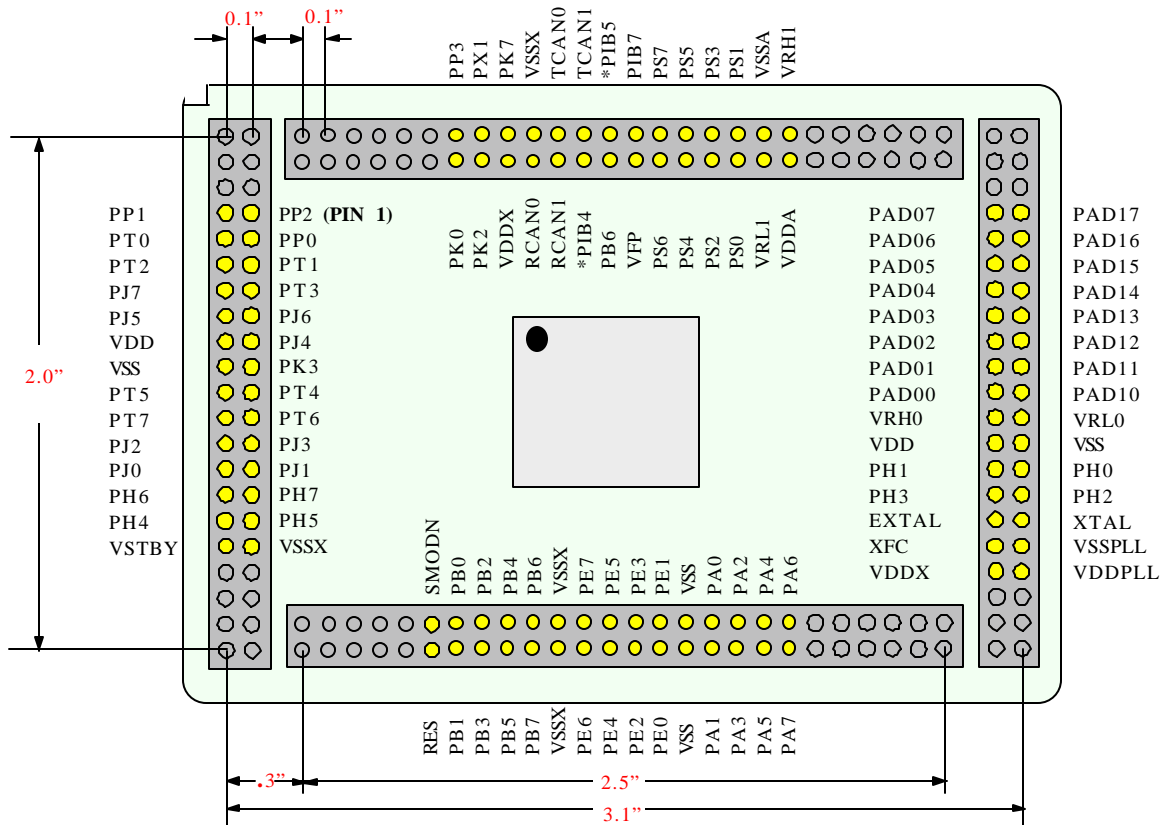
EMUL-68HC912DG128 Layout

This is the top view looking down on to the target board or on top of the 68HC912DG128 personality card.

Top View - 68HC912DG128

Version 2.1

December 17, 2001



* Please note that on the silkscreen, PIB4 and PIB5 are labeled RXCAN2 and TXCAN2 respectively.

- 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 into the bottom side.

Helpful measurements when laying out the board:

- On the top side, the emulator expands 0.2".
- On 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".

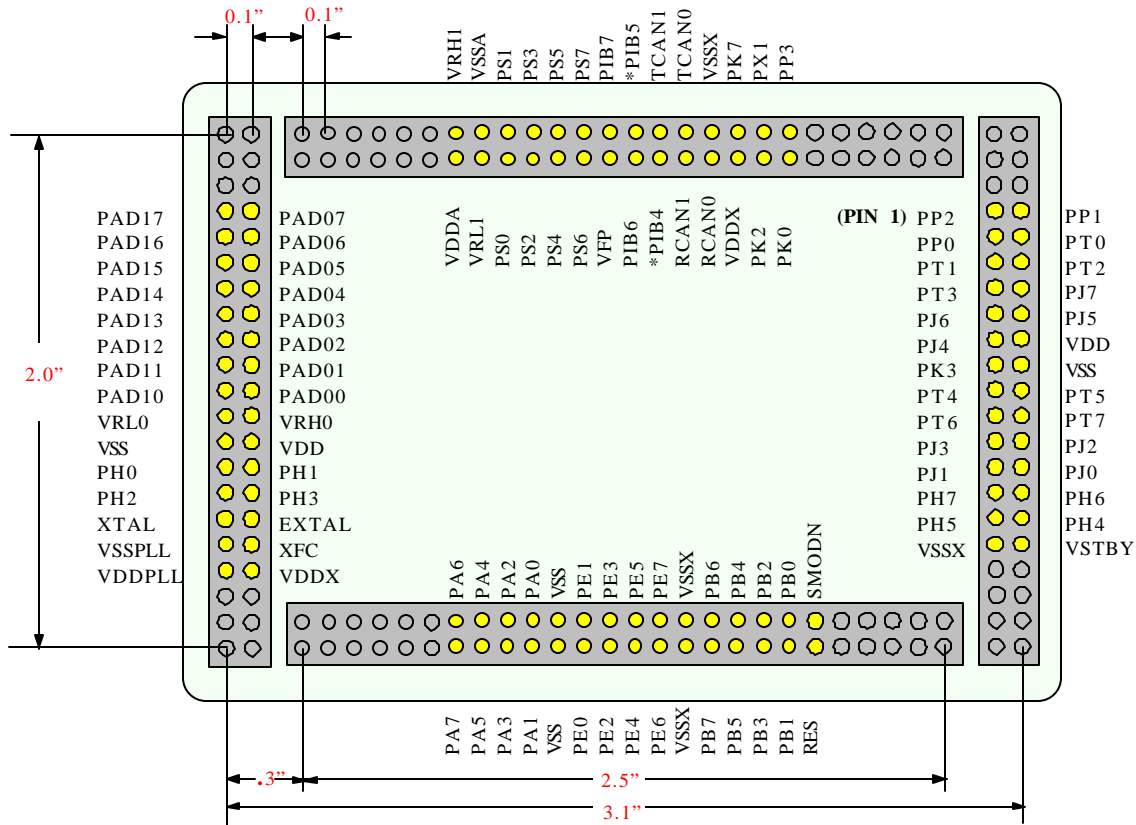


EMUL-68HC912DG128 Layout

This is the bottom view looking down onto the bottom of the emulator.

Bottom View - 68HC912DG128

Version 2.1
December 17, 2001



* Please note that on the silkscreen, PIB4 and PIB5 are labeled RCAN2 and TCAN2 respectively.

- 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.

EMUL-68HC912DG128 Pinouts

These are all the pin assignments for the 68HC912DG128 with the alternate names, if applicable.

Version 2.1

December 17, 2001

Pin 1	PW2/ PP2	Pin 53	LSTRB/TAGLO/ PE3	Pin 105	RxCAN0
Pin 2	PW1/ PP1	Pin 54	R/W/ PE2	Pin 106	VSSX
Pin 3	PW0/ PP0	Pin 55	IRQ/ PE1	Pin 107	VDDX
Pin 4	IOC0/ PT0	Pin 56	XIRQ/ PE0	Pin 108	PK7 /ECS
Pin 5	IOC1/ PT1	Pin 57	PA0 /ADDR8/DATA8/DATA0	Pin 109	PK2 /PIX2
Pin 6	IOC2/ PT2	Pin 58	PA1 /ADDR9/DATA9/DATA1	Pin 110	PK1 /PIX1
Pin 7	IOC3/ PT3	Pin 59	PA2 /ADDR10/DATA10/DATA2	Pin 111	PK0 /PIX0
Pin 8	KWJ7/ PJ7	Pin 60	PA3 /ADDR11/DATA11/DATA3	Pin 112	PP3 /PW3
Pin 9	KWJ6/ PJ6	Pin 61	PA4 /ADDR12/DATA12/DATA4		
Pin 10	KWJ5/ PJ5	Pin 62	PA5 /ADDR13/DATA13/DATA5		
Pin 11	KWJ4/ PJ4	Pin 63	PA6 /ADDR14/DATA14/DATA6		
Pin 12	VDD	Pin 64	PA7 /ADDR15/DATA15/DATA7		
Pin 13	PK3	Pin 65	VDD		
Pin 14	VSS	Pin 66	VSS		
Pin 15	IOC4/ PT4	Pin 67	VRH0		
Pin 16	IOC5/ PT5	Pin 68	VRL0		
Pin 17	IOC6/ PT6	Pin 69	PAD00 /AN00		
Pin 18	IOC7/ PT7	Pin 70	PAD10 /AN10		
Pin 19	KWJ3/ PJ3	Pin 71	PAD01 /AN01		
Pin 20	KWJ2/ PJ2	Pin 72	PAD11 /AN11		
Pin 21	KWJ1/ PJ1	Pin 73	PAD02 /AN02		
Pin 22	KWJ0/ PJ0	Pin 74	PAD12 /AN12		
Pin 23	SMODN /TAGHI/BKGD	Pin 75	PAD03 /AN03		
Pin 24	ADDR0/DATA0/ PB0	Pin 76	PAD13 /AN13		
Pin 25	ADDR1/DATA1/ PB1	Pin 77	PAD04 /AN04		
Pin 26	ADDR2/DATA2/ PB2	Pin 78	PAD14 /AN14		
Pin 27	ADDR3/DATA3/ PB3	Pin 79	PAD05 /AN05		
Pin 28	ADDR4/DATA4/ PB4	Pin 80	PAD15 /AN15		
Pin 29	ADDR5/DATA5/ PB5	Pin 81	PAD06 /AN06		
Pin 30	ADDR6/DATA6/ PB6	Pin 82	PAD16 /AN16		
Pin 31	ADDR7/DATA7/ PB7	Pin 83	PAD07 /AN07		
Pin 32	KWH7/ PH7	Pin 84	PAD17 /AN17		
Pin 33	KWH6/ PH6	Pin 85	VDDA		
Pin 34	KWH5/ PH5	Pin 86	VRH1		
Pin 35	KWH4/ PH4	Pin 87	VRL1		
Pin 36	DBE/CAL/ PE7	Pin 88	VSSA		
Pin 37	MODB/IPIPE1/ PE6	Pin 89	PS0 /RxD0		
Pin 38	MODA/IPIPE0/ PE5	Pin 90	PS1 /TxD0		
Pin 39	ECLK/ PE4	Pin 91	PS2 /RxD1		
Pin 40	VSSX	Pin 92	PS3 /TxD1		
Pin 41	VSTBY	Pin 93	PS4 /SDI/MISO		
Pin 42	VDDX	Pin 94	PS5 /SDO/MOSI		
Pin 43	VDDPLL	Pin 95	PS6 /SCK		
Pin 44	XFC	Pin 96	PS7 /SS		
Pin 45	VSSPLL	Pin 97	VFP		
Pin 46	RESET	Pin 98	PIB7 /SCL		
Pin 47	EXTAL	Pin 99	PIB6 /SDA		
Pin 48	XTAL	Pin 100	PIB5		
Pin 49	KWH3/ PH3	Pin 101	PIB4		
Pin 50	KWH2/ PH2	Pin 102	TxCAN1		
Pin 51	KWH1/ PH1	Pin 103	RxCAN1		
Pin 52	KWH0/ PH0	Pin 104	TxCAN0		

The part numbers in bold are the numbers used on the pin out drawings on pages 1 and 2.