ICE568 user manual

FOR
EM78568

Version 2.2
2005/1/19

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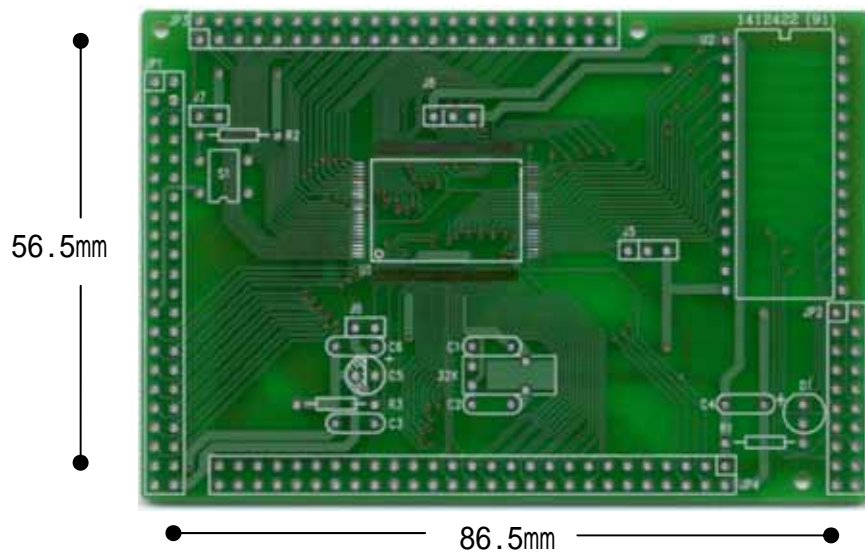TEL: (03) 5639977
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56.5mm

86.5mm

Figure 1.1 ICE Outline

1. Installation must be authorized by EMC.
2. Power on the E8 ICE before executing the control software, or an error message due to lack of hardware will appear.
3. E8 - ICE uses the printer port to communicate with host PC. If a user wants to use the printer, it is recommended to install another printer port.
4. Power on switch located on the left side of ICE box. By switching left or right side to turn off or turn on the ICE power.
5. Printer port and the adapter locate on the right side. The ICE connects to personal computer by printer port. The adapter connects to the power. Be sure turn power off of ICE before plug in the adapter for avoiding over current which may be burn the chip off.
6. On the top sight, we have three connections and one EM78R568 Romless chip and some switches. The JP1 and the JP2 connect to the second layer of ICE for the code instruction accessing. The JP3 and JP4 are more important for ICE user. They are the EM78568 control signal and I/O ports. ICE user can connect these connections to user's application board.
    The connections are list in Table 1.1.
7. The U1 is EM78R568 Romless chip. The U2 is a 32K bytes ROM for on board testing one day by piggyback. If user have developed application code by this ICE. User can use PIGGYBACK (user can buy from EMC) to connect to user's application board with 32K bytes EPROM (27c256). To verify user's program.
8. The D1 is a LED that indicates power is on or off.
9. X1 is 32.768k crystal. C1and C2 is capacitor 27p.C4 is PLL capacitor.(0.01u .. 0.044u)
10. ICE setup: (1) J5 connect to VDD (2)J6 short (3)J7 open (4)J8 connect to VDD or GND
11. PIGGYBACK setup: (1)J5 connect to GND (2)J6 short (3)J7 short (4)J8 connect to VDD or GND (5)U2=> 32k bytes EPROM (27C256).
    (User can use file "*.MIX" which generate by WICE for masking EPROM.
    The *.mix file is a binary file and addressing from zero.)
12. Run WICE software to enter ICE environment.

	pin	Name	pin	Name	pin	Name	pin	Name	pin	Name
JP3	1	COM0	11	SEG6	21	SEG16/P94	31	SEG26/PB2	41	NC
	2	COM1	12	SEG7	22	SEG17/P93	32	SEG27/PB1	42	TONE
	3	COM2	13	SEG8	23	SEG18/P92	33	SEG28/PB0	43	NC
	4	COM3	14	SEG9	24	SEG19/P91	34	SEG29/PC7	44	ALC
	5	SEG0	15	SEG10/P55	25	SEG20/P90	35	SEG30/PC6	45	NC
	6	SEG1	16	SEG11/P56	26	SEG21/PB7	36	SEG31/PC5	46	NC
	7	SEG2	17	SEG12/P57	27	SEG22/PB6	37	RXI	47	NC
	8	SEG3	18	SEG13/P97	28	SEG23/PB5	38	RXO	48	NC
	9	SEG4	19	SEG14/P96	29	SEG24/PB4	39	MICI	49	NC
	10	SEG5	20	SEG15/P95	30	SEG25/PB3	40	MICO	50	NC
JP4	1	VDD	12	AURX/P65	23	P80	34	SEG17/P93	45	SEG22/PB6
	2	GND	13	MTX/P66	24	P81	35	SEG16/P94	46	SEG21/PB7
	3	/RESET	14	DAO/P67	25	P82	36	SEG15/P95	47	PC0
	4	SEG10/P55	15	INT0/P70	26	P83	37	SEG14/P96	48	PWM1/PC1
	5	SEG11/P56	16	INT1/P71	27	P84	38	SEG13/P97	49	PWM2/PC2
	6	SEG12/P57	17	INT2/P72	28	P85	39	SEG28/P97	50	PC3
	7	P60	18	INT3/P73	29	P86	40	SEG27/PB1	51	PC4
	8	P61	19	P74	30	P87	41	SEG26/PB2	52	SEG31/PC5
	9	CMP1/P62	20	P75	31	SEG20/P90	42	SEG25/PB3	53	SEG30/PC6
	10	CMP2/P63	21	P76	32	SEG19/P91	43	SEG24/PB4	54	SEG29/PC7
	11	CMP3/P64	22	P77	33	SEG18/P92	44	SEG23/PB5		NC

Table 1.2 ICE Connections