PMEPGZ3230 USER GUIDE(Ver 0.2)

Package LIST:

1. EPGZ-3230 PM board*1
2. User Guide *1
3. ELAN Flash board *1

Emulator (ICE+PM board) Installation procedure:

1. The ICE-2002 is necessary in this procedure.
2. Plug PM board with ICE-2002 board (PM is on the top & ICE is at the bottom) via IR1&IR2.
3. Plug Demo board with PM board (Demo is on the top & PM is at the bottom) via CN1 and CN2.
4. Plug in Extent Printer cable to Printer Port
5. If External ROM is necessary, plug the Flash (AM29LV800BB) on the "External Memory" of PM board.
6. Check the JP5 and JP4(power jack) is "SHORT".
7. Check the JP10 is SHORT to "XTAL", JP8 is SHORT to "MCU", JP23 is short, JP20 is "short".
8. Plug in power jack (+5V) on the **ICE board power jack**, and switch on. The RED LED is on. Check the VDD & VDDA >3.3V.
9. Check the menu bar: "option"-> "project setting" is Extended MCU mode and debug mode, "option"->"ICE code option" items are right, and printer port connect to ICE.
10. RUN ELAN IDE program, open your project or set a new project,add your file to project, and execute "Rebulid ALL".
11. Press  to execute "GO" (output window: ICE initializing and ICE download)
12. Press  to initialize ICE
13. Press  to execute "GO" (wait a few seconds until  → )

(or Press  to execute "Timer GO" ,this function is used for displaying LCD RAM on the PC monitor. And the LCD display will be updated every 1 seconds.)

11. When you want to stop execution, press 

12. If any error is happened, press  →  , and run from STEP 6 again.
13. If STEP 11 not work, disconnect Printer port and DC power , and re-connect. Then run from STEP 6 again.

Processor Module (PM board) Installation procedure:

1. Remove ICE-2002 board, and leave PM board stand alone.
2. Plug in demo board to CN1 and CN2 jack.
3. Check the JP5 and JP4(power jack) is "SHORT".
4. Check the JP10 is SHORT to "XTAL", JP8 is SHORT to "MCU".
5. Plug in power jack (+5V) on the **PM board power jack**.
   Or Connect a 3V battery Jack at JP1.
   The RED LED is on. Check the VDD & VDDA >3.3V.
6. Press "RESET" key, and the CPU will run the code from U2.

Download Internal Data ROM:

1. Prepare a binary data file.
2. Press the menu bar: "Tool"-> "Download Internal ROM data", then select a binary data file and press enter from the dialog window.
3. Wait a few seconds until download ok message appearing.

Download External Data ROM:

1. Prepare a binary data file and plug the ELAN flash board to the "Flash Writer" of PM board.
2. Press the menu bar: "Tool"-> "Download external ROM data", then select a binary data file and press enter from the dialog window.
3. Wait a few seconds until download ok message appearing.
4. Pull up the Flash board and plug to the "External Memory" of PM board.

Personal Computer setup:

1.Set Printer Port at EPP mode(Enhanced Parallel Port mode)
And set Parallel port address at 378h or 278h (3BCh is not available).
Ex:
Take an example on **AWARD BIOS** setup:
Main menu / Chipset Feature Setup / Parallel Port Mode / EPP
2.The default Parallel Port is 378h.
If your computer is not 378h, please change to other address at
ELAN IDE tool / Option / Connect / Connect Port

Hardware setup:

Jack:

J1: DC 5V/ 2A Power supply (Inner:5V, Outer :GND)

Switch:

Reset: *System Reset* key.

Connector:

JP4: Let it ***"***Short" when normal operation, Connect a current meter when you want to measure All current(include CPU & EPROM)
(Current measurement at Processor module is suggested)

JP5: Let it "Short" when normal operation, Connect a current meter when you want to measure CPU current.
(Current measurement at Processor module is suggested)

JP8: Let it short to "MCU" when PM operating in MCU mode or External MCU mode, or short to "PM" when PM operating in Processor mode.

JP10: Let it short to "XTAL" when PM operating clock from 32.768kHz crystal, or it short to "RC" when PM operating clock from RC oscillator.

JP20: Let it "Open".

JP23: Let it "Short" when MCU Analog Front End output connects to ADIN6 (PC.2)(Notice it in the Code option setting)

CN1 & CN2: Interface for connecting to Demo Board.

no.	CN1		no.
1	VCC	VSS	2
3	AMPO	AVSS	4
5	RSTB	CLKO	6
7	VREX	MIC	8
9	PA.0	PA.1	10
11	PA.2	PA.3	12
13	PA.4	PA.5	14
15	PA.6	PA.7	16
17	PB.0	PB.1	18
19	PB.2	PB.3	20
21	PB.4	PB.5	22
23	PB.6	PB.7	24
25	PJ.0	PJ.1	26
27	PJ.2	PJ.3	28
29	PJ.4	PJ.5	30
31	PJ.6	PJ.7	32
33	PK.0	PK.1	34
35	PK.2	PK.3	36
37	PK.4	PK.5	38
39	PK.6	PK.7	40
41	PC.0	PC.1	42
43	PC.2	PC.3	44
45	PC.4	PC.5	46
47	PC.6	PC.7	48
49	PI.0	PI.1	50
51	PI.2	PI.3	52
53	PI.4	PI.5	54
55	PI.6	PI.7	56
57	VCC	VCC	58
59	VSS	VSS	60

no.	CN2		no.
1	PD.7	PD.6	2
3	PD.5	PD.4	4
5	PD.3	PD.2	6
7	PD.1	PD.0	8
9	PE.7	PE.6	10
11	PE.5	PE.4	12
13	PE.3	PE.2	14
15	PE.1	PE.0	16
17	PF.7	PF.6	18
19	PF.5	PF.4	20
21	PF.3	PF.2	22
23	PF.1	PF.0	24
25	PH.7	PH.6	26
27	PH.5	PH.4	28
29	PH.3	PH.2	30
31	PH.1	PH.0	32
33	PG.7	PG.6	34
35	PG.5	PG.4	36
37	PG.3	PG.2	38
39	PG.1	PG.0	40
41	PB.3	PB.4	42
43	PD.7	PB.6	44
45	VCC	VSS	46
47	RSTB	CLKO	48
49			50