



### EM61IDE Compiler Updated to V3.0

Document Number :	<b>AP-EM61-0020E-V1</b>
Date of Issue :	<b>26,November ,2003</b>
Issue Version :	<b>1.0</b>
Supported Chips :	<b>See notes</b>
Applicable Software :	<b>3.0</b>

#### 1.0 EM61000 Series Compiler Version 3.0 Update :

- Enhance the Instrument's quality more reality & smoothly.
  - Independent Envelope timer. No change the Envelope with difference Tempo.
  - Modify the Envelope process sub-routine for smoothly instrument.
  - Modify the Envelope data (.ENV) for new Envelope process sub-routine
  - Modify the Instrument list (.IST) for new Envelope process sub-routine
- Support the Major function in standard melody play routine.
- Support the Two midi songs playing together.
- Support loop play function with Measure code at Song2
- Support the song change Tempo at midi file.
- Support the song change Meter at midi file.
- Support the max. 255 instrument (Tone and Percussion) at one project.
- Provide text format melody file output (.MLD).
- Provide midi song's Measure number code.
  - User can define special active synchronize with midi song play.
- Provide midi song's User special code.
  - User can define special code with midi "NRPN 0"
  - Max. 127 index number for special code.
- Provide the direct read key & Scan key matrix standard Macro routine.
  - User define direct read port & read bits.
  - User define Scan key matrix I/O port & bits
- Provide user define "Play midi" icon direct play midi file.
  - User can define special .IST & .ENV
  - User can define for 4ch melody direct play.
- Provide Output window message to text file(.MSG)



# EM61000 Series

## APPLICATION NOTES

- Provide max. 69 standard midi instrument .
- Provide 13 tutorial projects.

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## 2.0 EM61000 Compiler V3.0 Update & Modification File List:

- Path ..\exe\
  - EMC61000.exe
  - instmap.ini
  - sample.env
- Path ..\exe\include\
  - EM61VOC.def
  - EM610macro\_v30.def ; EM611macro\_v30.def ; EM612macro\_v30.def
  - EM61\_key\_macro.def
  - EM61001mdyc30.asm; EM61002mdyc30.asm; EM611mdyc30.asm;  
M612mdyc30.asm
- Path ..\exe\Play61Midi4User\
  - for user define “Play midi” project.
- Path ..\instlib\
  - Enhance 8 instruments.
- Path ..\tutorial\
  - Provide 13 tutorial project source program & data.

### NOTE

- *The EM61IDE ver3.0 is Enhanced version ,  
So the old version's project don't have these Enhance function .  
User must create a New project to include the new the functions !*
- *Please goto [Elan Web](http://www.emc.com.tw) to update your EM61IDE compiler and  
download the new version User Guide !  
(path: [http://www.emc.com.tw/products/consumer line/EM61  
serial/ supporting tools/product/EM61000 compile & user guide](http://www.emc.com.tw/products/consumer_line/EM61_serial/supporting_tools/product/EM61000_compile_%20user_guide) )*