

## Tools Release Notes

Project No.: TICE89IDE

Issued Date: 2022-10-14

Supported Hardware:

TICE89 ICE board

Software version:

Setup file: Setup\_TICE89\_USB\_V1.1.2build016.exe

IDE version:

Version number: 1.1.2

Build number: 016

Assembler version: 1.8.17 (ca89.exe)

Linker version: 2.2.7 (ld89.exe)

Supported Bodies:

TM85 series:

TM8530

TM87 series:

MASK: TM8720, TM8721, TM8722, TM8723, TM8724, TM8725, TM8726, TM8727, TM8727A1,  
TM8761, TM8762, TM8763, TM8767, TM8768, TM8776, TM87R04

OTP: TM87P18M, TM87PL37, TM87PL36, TM87PL35

MTP: TM87ML22, TM87M23, TM87ML25, TM87ML26, TM87ML28

TM89 series:

MASK: TM8951, TM8952, TM8955, TM8957, TM8959, TM89ML56, TM87ML25

OTP: TM89P51M, TM89P52M, TM89P55M, TM89P57M, TM89P59M

Changes in This Release:

Changes Notes:

[Important updates]

- (Fix) Udata TM87PL35.rul
- (Fix) Udata TM872862/63.tin
- (Fix) Udata TM87PL35.coe(v0.1->v0.2 SETDAT )
- (Fix) Modify TM87PL35 build \*.epm file error. (checksum & HalfSize & RomTotalSize)
- (Fix) Udata TM8722.tin.((6A)6D.F|9D.F|10A.F->(6A)6D.F&9D.F&10A.F => 17 items in total )
- (Fix) Udata TM8723.tin.((6A)6D.F|9D.F|10A.F->(6A)6D.F&9D.F&10A.F => 16 items in total )
- (Fix) Udata TM8727.tin.((6A)6D.F|9D.F|10A.F->(6A)6D.F&9D.F&10A.F => 16 items in total )
- (Fix) Udata TM8726.tin.((6A)6D.F|9D.F|10A.F->(6A)6D.F&9D.F&10A.F =>16 items in total )
- (Fix) Udata TM87P32.tin(v0.2->v0.3)
- (Fix) Udata TM87PL35.tin(v0.1->v0.2)
- (Fix) Udata TM87PL36.tin(v0.8->v0.9)
- (Fix) Udata TM87PL35\_epm.rul(v0.2->v0.3)
- (Fix) Udata TM87PL36\_epm.rul(v0.4->v0.5)
- (Fix) Udata TM87PL37\_epm.rul(v1.1->v1.2)
- (Fix) Udata TM87ML22\_epm.rul(v0.4->v0.5)
- (Fix) Udata TM87ML25\_epm.rul(v1.4->v1.5)
- (Fix) Udata TM87ML26\_epm.rul(v1.0->v1.1)
- (Fix) Udata TM87ML22\_epm\_tm87pl35.rul(v0.0->v0.1)

- (Fix) Updata TM87ML25\_epm\_tm87pl35.rul(v0.0->v0.1)
- (Fix) Updata TM8725\_epm\_tm87pl36.rul(v0.0->v0.1)
- (Fix) Updata TM8726\_epm\_tm87pl36.rul(v0.0->v0.1)
- (Fix) Updata TM87ML26\_epm\_tm87pl36.rul(v0.1->v0.2)
- (Fix) Updata TM87P32.coe(v0.2->v0.3 SRE )
- (Fix) Updata TM87PL36.coe(v0.3->v0.4 SXCLK )

[New functions or enhancements]

- (New) Add Menu\Tools\TM8726 \*.tcod to TM87PL36 \*.tcod (include \*.epm ; compiler versioiin is 0).
- (New) Add TM87P32.

[Problems fixed]

None

Summary of Changes

Where < > Software version number

[Important] Important update

(New) New function or enhancement

(Fix) Correction to existing function

<V112 Build011>-----

Changes Notes:

[Important updates]

- (Fix) Updata ld89.exe version 2.2.7.
- (Fix) Updata ca89.exe version 1.8.17
- (Fix) Updata TM87ML25\_epm.rul(v1.3->v1.4)
- (Fix) Updata TM87ML26\_epm.rul(v0.9->v1.0)
- (Fix) Updata TM87PL36\_epm.rul(v0.3->v0.4)
- (Fix) Updata TM87PL37\_epm.rul(v0.9->v1.1)
- (Fix) Updata EPMX (v2.4->v2.5)
- (Fix) Updata Menu\Tools\Build Pack File.  
 (When TM87PL37 is select one code then IDE will pack PRJ.epm.  
 When TM87PL37 is select two code then IDE will pack PRJ\_1st.epm.)
- (Fix) Updata Menu\Tools\Convert to TMXXXX \*.epm and Pack File(\*.tcod) 曹???
- (Fix) delete TM8767/8768/8727 Convert to TM87ML28 \*.epm and Pack File(\*.tcod)

[New functions or enhancements]

- (New) Add TM87ML26 Convert to TM87PL36.
- (New) Add TM87ML25/25/ML22/22/62 Convert to TM87PL35.
- (New) Add TM87PL35\_epm.rul.
- (New) Add Menu\Tools\TM8727 \*.tcod Convert to TM87PL37 \*.tcod (Include \*.epm and the compile version is 0.0.0)
- (New) Add Menu\Tools\TM8725 \*.tcod Convert to TM87ML25 \*.tcod (Include \*.epm and the compile version is 0.0.0)

[Problems fixed]

None

<V112 Build007>-----

Changes Notes:

[Important updates]

- (New) Add TM87PL35(Test chip)
- (New) Add TM87PL36, TM87PL37
- (Fix) Udata ld89.exe version 2.2.6.
- (Fix) Udata ca89.exe version 1.8.16
- (Fix) TM87R04 build \*.ice file and pack in \*.tcod file.

[New functions or enhancements]

None

[Problems fixed]

None

<V110 Build012>-----

Changes Notes:

[Important updates]

- (New) Add TM87ML26(Test chip)
- (Fix) Udata ld89.exe version 2.1.8.
- (Fix) Update tm87ml26\_epm.RUL
- (Fix) Udata tm8726\_epm\_tm87ml26.RUL
- (Fix) Update tm87ml26.RUL

[New functions or enhancements]

None

[Problems fixed]

None

<V110 Build006>-----

Changes Notes:

[Important updates]

- (New) Release TM87M23
- (Fix) Udata TM8724.tin (option can't select "STATIC").
- (Fix) Update TM89P55M.RUL
- (Fix) Udata tm8723\_epm\_tm87m23.RUL
- (Fix) Update tm8763\_epm\_tm87m23.RUL

[New functions or enhancements]

None

[Problems fixed]

None

<V110 Build005>-----

Changes Notes:

[Important updates]

- (Fix) TM87ML25 28 22 /TM87M23 Option star Address is 03h.
- (Fix) TM87ML28 22 /TM87M23 Option Not included in checksum calculation.

[New functions or enhancements]

None

[Problems fixed]

None

<V110 Build003>-----

Changes Notes:

[Important updates]

- (New) MTP Body : TM87ML22, TM87ML25, TM87ML28
- (New) MASK Body: TM8761
- (Fix) Modify TOOLTIP for test chips.( Only reserved TM87M23 and TX9792)
- (Fix) ld89.exe V2.1.7( Disable auto insert "SRY" instruction in TM87M23)

[New functions or enhancements]

- (New) Create TM87ML28 instruction keywords and Autocomplete strings.
- (New) Add TX89ICE\_xp32.bat to the installation directory, you can modify the execution compatibility setting of TX89ICE.exe by yourself.
- (New) The function is convert TM8723/TM8763 to TM87M23 \*.EPM file.
- (New) The function is convert TM8722/TM8762 to TM87ML22 \*.EPM file.

[Problems fixed]

1. IDE

- (Fix) Update TM87ML25\_EPM.RUL
- (Fix) Update TM8721.RUL

<V109 Build010>-----

Changes Notes:

[Important updates]

None

[New functions or enhancements]

None

[Problems fixed]

1. IDE

- (Fix) TM87ML25, Com1 set to DC output.
- (Fix) When execute "TM8793 build pack file", and the project did not generate epm file before, IDE will automatically generate epm file.
- (Fix) When checking option, the number of error items displayed on the output window is incorrect.
- (Fix) Build epm file and error occurs, IDE will stop the next action.
- (Fix) When convert 87 program to 89 format, and the table data repeat definition, the last definition will replace the previous one.
- (Fix) TM87ML25 tcod file include cfg file
- (Fix) Comparison function add cfg and epm file(if it will generate epm file)
- (Fix) merge epmx.c program to TICE89IDE (v 2.1)
- (Fix) TM87ML25 tin file (v1.0)
- (Fix) In TM87ML25 project, when user setting option file, the V, O, X icon is incorrect.
- (Fix) When IDE is closing, in TM87ML25 project, the warning message about wrong number of the option item is incorrect.
- (Fix) It will show the message about conversion content before the process of 87 program format conversion to 89.
- (Fix) The debug status from "GO" to "Pause", it will not show light bar of the breakpoint in the program.

2. Linker

- (Fix) TM87ML25 can not jump locally when it exceeds 800H
- (Fix) segments.c parameter error problem

<V109 Build009>-----

Changes Notes:

[Important updates]

None

[New functions or enhancements]

None

[Problems fixed]

1. IDE

- (Fix) In tx9792.tin, fix the logical condition error.
- (Fix) Generates the epm file and wraps it into the tcod file
- (Fix) When new / open project, check the various files in the header version of the program
- (Fix) In 87/89 series, when open a new project and read tin file to generate opt file, the number of sub-options changed from 1,2 ... (serial number) to 1,2,3 ..... 9, A, B, C ....
- (Fix) When opening a new project, there will execute single step and can not leave from this situation
- (Fix) In disassemble procedures, parameters for the @HL instruction can not correctly translate.
- (Fix) When a subdirectory name contains "." In the full path of the project, the watch variable will not be displayed
- (Fix) Translate TM8725 tcod file to TM87ML25 epm file, the conversion process is incorrect, and can not display the details of the error
- (Fix) Asm source code: 87 converted to 89 instruction format

<V109 Build008>-----

Changes in This Release:

Changes Notes:

[Important updates]

1. Supply all chips of TM87 series

[New functions or enhancements]

1. IDE

- (New) Write back checksum value to epm file.

[Problems fixed]

1. IDE

- (Fix) In new/open project file, modify the checking version program for each file.
- (Fix) When generate opt file from tin file, change the sequence number from 1,2,3..9,10.....to 1, 2, 3...9,A,B...
- (Fix) Modify tm8725 coe file
- (Fix) In Disassemble program, fix the issue of @HL instruction is wrong.
- (Fix) When the project full file path has "." character in it, and IDE can not show watch variable correctly.

<V109 Build006>-----

Changes in This Release:

Changes Notes:

[Important updates]

1. Update ld89.exe V2.0.7

[New functions or enhancements]

1. IDE

- (New)TM8793 Build Pack File Function
- (New)TM8768 Chip

[Problems fixed]

1. IDE

- (Fix) Modify the problem of tab information did not follow the setting of org.

<V109 Build001> -----

Changes in This Release:

Changes Notes:

1. Add Compare for OPT and LCD

[Important updates]

None

[New functions or enhancements]

1. Add TM8767 transfer to TM8793

[Problems fixed]

1. Tx9792 Option

- ;V0.2
- ;1. 1-2(2) rule add. 1-1(7)
- ;2. 1-2(3) rule add. 1-1(3),(6) for AG Mode
- ;3. 1-3(3) rule add. 1-1(7)
- ;4. 4-1(6) rule fix 1/2B no support VL Regulator for VDX&VDL Buffer need VDL NMOS make driver >1mA
- ;V0.1
- ;1. add. "VDL(initial=1.05V, VDL > 1.20V)" for BAK
- ;2. add. rule for 2(3)
- ;V0.0
- ;form TM89ML56 V0.5
- ;1. change "VREF" to "VREG"
- ;2. change "(3) 1.5V BATTERY" to "(3)1.5V BATTERY(BAK=VBAT for BCF=0)"
- ;3. Add. "(6)1.5V BATTERY(BAK=VREG for BCF=0)"
- ;4. "VDL" add. initial=1.05/2.10V"
- ;5. "(3) VL1(BY VDL)" delete rule
- ;6. change 1-2(2),(4) rule description
- ;7. 1-3 add.(1)description & delete (1) rule & add. (3)
- ;8. 2-4(4) change rule description
- ;9. add 4-1(6)"1/2 BIAS" rule

2. Modify TM89P52M option Error