MC68HC705V8, MC68HC705V12 EEPROM Programming Tool

# ODESSA 2002

Microprocessor Tools

#### 1.1 What You'll Need

The following checklists describe items that are shipped with your programming tool and any additional item's that you need to use this programming tool.

#### Hardware checklist

Host	-A 32-bit x86 based or Pentium PC with a free LPT
	( Printer port ), a hard-disk system
Memory	-Minimum 16 Mbytes
Display	-Color VGA display recommended
<b>Power supply</b>	-A 12-volt/300 mA linear power supply source
Cable	-An DB25 "straight-thru" cable

#### Software checklist

OS -MS-Windows (Win95, Win98, Win2000) Software tool -ETL HC705V12 control software

### Unpacking the package

**Contents:** -MC68HC705V8/V12 programmer board

-25-pin "straight-thru" cable

- ETL CD with control software

#### 1.2 Installing the Programmer Tool

The programmer tool is designed to accept 2 different types of MC68HC705V family micro-controllers derivatives (IC s), which fit of these devices: MC68HC705V8 | MC68HC705V12. Before installation the programmer tool, setup ETL HC705V12 software on the PC, follow to wizard prompt.

To install the programmer tool, follow these steps:

1) Insert a explorer IC into Programmer toll according with 1-st key position, make sure that IC installed correct.

2) Connect a LPT cable to the 25-pin connector on the programmer tool to a LPT (1,2) port on the PC.

3) Connect the power supply source according with correct polarity (an external 12 V DC power supply source is required).

4) Turn ON power supply source, make sure that LED1 flashing few seconds and stop (light colour GREEN continuously).

5) Start HC705V12 control software.

6) Click "Device" button first (see Figure 1) and wait when auto detect is completed (See Figure 2).

7) Click on inlay "Program Sequence", "Read Sequence" (see Figure 2) and push operation buttons on your choice "Read", "Erase", "Program", "Verify" (See Figure 3).

8) Press "Start" button to begin operation (See Figure 3).

🔯 ETL MC68HC705V12 Programmer	
File Edit Tools Window Help	
Device Demo Mode	
Program Sequence B Read Sequence	
Erase Program Verify Verify EEPROM SEPROM SEPROM SEPROM	▶ Start
Undo the last action	



🔯 ETL MC68HC705V12 Programmer
File Edit Tools Window Help
Contraction Device MC68HC705V12
C3 Program Sequence 🔯 Read Sequence
Erase Verify Verify Verify Verify Verify Verify Verify NOT Start
Identifying the Device MC68HC705V12 Programmer VER-1.0 Device Identification completed successful.
Program Sequence

Figure 2 (Identification completed)

File Edit Tools Window Help         Device       MC68HC705V12         Program Sequence       Read Sequence         Erase       Program         Verify       EEPROM         EEPROM       EPROM         Kentifying the Device       MC68HC705V12         Mc68HC705V12       Start         Mc68HC705V12       Start	🔯 ETL MC68HC705¥12 Programmer
Image:	File Edit Tools Window Help
Image: Device       MC68HC705V12         Image: Device       Image: Device         Image: Device<	
Program Sequence       Program       Verify         Erase       Program       Verify         Program       EPROM       EPROM         Program       EPROM       EPROM         Read Sequence       Start         Program       EPROM         EPROM       EPROM         Program       EPROM         EPROM       EPROM	Device MC68HC705V12
Erase       Program       Verify         EEPROM       EPROM       EPROM       EPROM         Mentifying the Device       MC68HC705V12 Programmer VER-1.0       Device Identification completed successful.	Program Sequence B Read Sequence
Mentifying the Device MC68HC705V12 Programmer VER-1.0 Device Identification completed successful.	
MC68HC705V12 Programmer VER-1.0 Device Identification completed successful.	Mentifying the Device
Device Identification completed successful.	MC68HC705V12 Programmer VER-1.0
	Device Identification completed successful.

Figure 3 (Operation buttons) Begin operation

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9) Click Editor Button for preview a dump contents and edit data in case of necessary (see Figure 4).



Figure 4 (Editor button)

LED REPORT:

- 1) LED1 appear ORANGE colour continuously:
- IC not inserted
- Bad contact in socket (see Figure 5)
- 2) LED1 appear RED colour continuously:
- Service mode entered
- 3) LED1 fast flashing GREEN colour:
- IC identification in progress
- "Write" or "Read" operation in progress

🔯 ETL MC68HC705¥12 Programmer
File Edit Tools Window Help
Carl Device Demo Mode
Program Sequence 🔁 Read Sequence
Erase Program Verify_
Identifying the Device
MC68HC705V12 Programmer VER-1.0
Poor contact at pin(s): 57

Figure 5 (Error: pure contact)

## CAUTION:

- Don't insert two IC's into sockets at the same time
- Don't mount P1 and P2 jumpers (reserved for test needs)
- Don't forget unmount Jp1 jumper before hardware update

Warranty statement: ETL warrants that Product delivered shall conform to applicable. Report any defects for a 45 days period from the applicable date of invoice.

## **APPENDIX 1:**

Figure 6: Programmer board layout



Power supply connector

## **APPENDIX 2:**

Supported Microcontrollers:

- MC68HC705V12 (mask set 0H24M)
- MC68HC705V8 (mask set 4F82W)

## **APPENDIX 3:**

Troubleshooting the programmer:

If you should some difficulties when programming a 705V... part which Inserted into sockets such as incorrect data reading or writing click menu button "Tools" first, next click "LPT port Options" button then set LPT base address, Speed and Ready pin settings to resolve the problem.

If you should some difficulties with control software such as disappear progress bar, Fonts changes or other click menu button "Tools" first, next click "Reset to default" button then return installation-specific settings.