

ETL programmers support for Motorola 8/16-Bit MCU's

Information brochure

MC68HC(7)05B/X EEPROM Programming tool:

(By-pass security bit, 100% storage of EEPROM data guaranteed)

- MC68HC05B6
- MC68HC05B8
- MC68HC05B16
- MC68HC05B32
- MC68HC705B16*
- MC68HC705B32
- MC68HC05X16
- MC68HC05X32
- MC68HC705X16
- MC68HC705X32

Package supported: 52PLCC, 64QFP devices

NOTE * MC68HC705B16N – supported unsecured IC’s only.

Software: etlunipro Windows software (Win 95/98/2000), MS-DOS software

NOTE: In case of using win XP OS wait 3-4 minutes after start of etlunipro for detecting programming board.

MC68HC705E6 EEPROM COPIER TOOL:

(Standalone buttons control operation, additional 24C02 programmer required. For example: Dataman or ETSMART4).

- MC68HC705E6 (0H51A)
- MC68HC05E6 (0G72G)
- MC68HC05E6 (0F28B)
- MC68HC705P3 (1F75B)
- MC68HC05P3 (1E25BH)

Package supported: SOIC28

IC numbering system for 68HC(7)05:

MC	68HC	705	B16	N	C	FN
↓	↓	↓	↓	↓	↓	↓
Status of products: MC = fully qualified XC = partial qualified PC = Product engineering KMC = Sample pack SPAK = Sample pack	Core: HSC = High speed HRC = RC Oscillator HLC = Low power	Blank = ROM - mask 7 = OTP 8 = EEPROM	Family	Shrink or Revision	Temperature range Blank = 0C to 70C I = 0C to 85C C = -40C to 85C V = -40C to 105C M = -40C to 125C	Packaging designator

MC68HC(9)08AZ60 FLASH\EEPROM programmer:

(By-pass security sequence, 100% storage of FLASH/EEPROM data guaranteed)

- MC68HC908AZ60 (2J74Y)
- MC68HC908AZ60 (4J74Y)
- MC68HC908AZ60A (3K85K)
- MC68HC908AS60 (3J74Y)
- MC68HC908AS60A(1L87J)
- MC68HC908AB32 (3K56G)
- MC68HC08AZ60 (1J35D)
- MC68HC08AZ32 (0J66D)
- MC68HC08AZ32 (1H56A)
- MC68HC08AS20 (0H94K)
- MC68HC08AZ32A (1L52H)
- MC68HC05H12 (0H57A) \\See IC numbering system for 68HC05 family\\

Package supported: 52PLCC, 64QFP, 100QFP devices

Software: HC08prog Windows software (Win 95/98/2000).

NOTE: In case of using win XP OS wait 3-4 minutes after start of hc08 for detecting programming board.

IC numbering system for 68HC(9)08:

MC	68HC08	AZ	60	A	C	FN
↓	↓	↓	↓	↓	↓	↓
Status of products: MC = fully qualified XC = partial qualified PC = Product engineering KMC = Sample pack KXC = Sample pack	Core: HSC = High speed HRC = RC Oscillator HLC = Low Power Blank = ROM – Mask 7 = OTP 8 = EEPROM 9 = FLASH	Family	Approximate memory	Shrink or Revision	Temperature range Blank = 0C to 70C I = 0C to 85C C = -40C to 85C V = -40C to 105C M = -40C to 125C	Packaging designator

MC68HC11KA1/KA4/PA8/P2 EEPROM Programming tool, MC68HC11E9/A8 EEPROM

Programming tool:**

(By-pass security bit, storage of EEPROM data for most known mask-sets)

- MC68HC11KA1
- MC68HC11KA4
- MC68HC11PA8
- MC68HC11P2
- MC68HC11E9**
- MC68HC11A8**

Package supported: 68PLCC, 64QFP, 52PLCC** devices

**NOTE: MC68HC11E9, MC68HC11A8 devices only.

Software: etluniprogram Windows software (Win 95/98/2000), MS-DOS software

NOTE: In case of using win XP OS wait 3-4 minutes after start of etluniprogram for detecting programming board.

MC68HC(7)11 EEPROM programming tool

(By-pass security bit, 100% storage of EEPROM data guaranteed for most known mask-sets)

- MC68HC11A8 (AB95T)
- MC68HC11A8 (C96N)
- MC68HC11A8 (D26E)
- MC68HC11E20 (3E22B)
- MC68HC11E9 (1B60R)
- MC68HC11E9 (D82R)
- MC68HC11E9 (E22B)
- MC68HC11E9 (E28B)
- MC68HC11EA9 (2D47J)
- MC68HC11F1 (2F37E)
- MC68HC11F1 (E87J)
- MC68HC11K1 (2D58N)
- MC68HC11K4 (1E62H)
- MC68HC11K4 (OE75J)
- MC68HC11KA4 (1E59B)
- MC68HC11KS2 (0H95B)
- MC68HC11KS4 (0E57S)
- MC68HC11KS4 (0F60M)
- MC68HC711E20 (1H19S)
- MC68HC711E9 (4K81H)
- MC68HC711E9 (5C47M)
- MC68HC711EA9 (0D46J)
- MC68HC711K4 (K59D)
- MC68HC711PH8 (0H30R)
- MC68S711E9 (5C47M)
- XC68HC711KS8 (1H96P)

Package supported: 52PLCC, 68PLCC, 84PLCC, QFP64, LQFP80 devices

Software: hc11program Windows software (Win 98/2000/XP/2003)

IC numbering system for 68HC(7)11:

MC	68HC	P	711	E9 B	C	FN 3
Status of products: MC = fully qualified XC = partial qualified PC = Product engineering KMC = Sample pack K = Sample pack	Core: Voltage range: HC = 5.0V S = SECURED L = 3.0V-5.0V	COP enabled	Memory type BLANK = ROM 7 = OTP 8 = EEPROM	Family B Buffalo monitor enabled	Temperature range Blank = 0C to 70C I = 0C to 85C C = -40C to 85C V = -40C to 105C M = -40C to 125C	Packaging designator 3 - Bus speed marker

MC68HC912/9S12 FLASH/EEPROM Programmer

(By-pass security feature, 100% storage of FLASH/EEPROM data guaranteed)

- MC68HC912 DC128A (3K91D)
- MC68HC912 DG128 (5H55W)
- MC68HC912 DG128A (3K91D)
- MC68HC912 B32 (4J54E)
- MC68HC912 D60A (2K38K)
- MC68HC912DG128 (0K50E)
- MC68HC912D60 (0K13J)
- MC68HC912B32 (9H91F)
- MC68HC912D60 (0K75F)
- MC68HC912D60 (4F73K)
- MC9S12D64 (2L86D)
- MC9S12 DG128B (0L85D)
- MC9S12 DT128B (0L85D)
- MC9S12 A128B (0L85D)
- MC9S12 DB128B (0L85D)
- MC9S12 DG256C (2K79X)
- MC9S12 DT256C (2K79X)
- MC9S12 DP256C (2K79X)
- MC9S12DT128B (1L85D)
- MC9S12DP512 (1L00M)

Package supported: 80QFP, 112LQFP; 144 QFP devices

Software: hc912prog Windows software (Win 98/2000/XP/2003)

ATTENTION:

On-board programming interface designed for establishing connection with target device when MCU secured (9S12 devices) or BDM module disabled (912 devices). Before use BDM feature use On-board programming interface. If BDM Lockout bit (NOBDML) programmed to zero, further access to MCU will be blocked after next reset. The only one way to grant access to locked MCU is mount MCU on corresponding adaptor and use On-Board programming interface.

On-Board programming interface not implemented for MC68HC912B32 device.

IC numbering system for 68HC(9)12:

MC	68HC	9 12	B 32	A	C FU	8
↓	↓	↓	↓	↓	↓	↓
Status of products: MC = fully qualified XC = partial qualified PC = Product engineering KMC = Sample pack KXC = Sample pack	Optional prefix	9 = Memory type Blank = ROM 7 = OTP 8 = EEPROM 9 = FLASH 12 = Core type	B = Family 32 = Approximate memory	Shrink or revision	Temperature range Blank = 0C to 70C I = 0C to 85C C = -40C to 85C V = -40C to 105C M = -40C to 125C FU = packaging designator	Optional bus speed

IC numbering system for 68HCS(9)12:

MC	9	S12	Dx	256 B	xx	x
↓	↓	↓	↓	↓	↓	↓
Status of products: MC = fully qualified XC = partial qualified PC = Product engineering KMC = Sample pack KXC	Memory type 9 = FLASH	Core type	Family	Approximate memory B = Flash revision	Temperature range C = -40C to 85C V = -40C to 105C M = -40C to 125C	Packaging designator

For more information review ETL web site <http://www.etlweb.net/>
For products information E-mail at prodinfo@etlweb.net
For technical request E-mail at techsupport@etlweb.net