EF6805P2

ADVANCE INFORMATION

8-BIT MICROCOMPUTER UNIT

The EF6805P2 Microcomputer Unit (MCU) is a member of the EF6805 Family of low-cost single-chip microcomputers. This 8-bit microcomputer contains a CPU, on-chip CLOCK, ROM, RAM, I/O, and TIMER. It is designed for the user who needs an economical microcomputer with the proven capabilities of the 6800 -based instruction set. A comparison of the key features of several members of the 6805 Family is shown at the end of this data sheet. The following are some of the hardware and software highlights of the EF6805P2 MCU.

HARDWARE FEATURES

- 8-Bit Architecture
- 64 Bytes of RAM
- Memory Mapped I/O
- 1100 Bytes of User ROM
- 20 TTL/CMOS Compatible Bidirectional I/O Lines (8 Lines are LED Compatible)
- On-Chip Clock Generator
- Self-Check Mode
- Zero Crossing Detection
- Master Reset
- Complete Development System Support on DEVICE®
- 5 V Single Supply

SOFTWARE FEATURES

- Similar to 6800 Family
- Byte Efficient Instruction Set
- Easy to Program
- True Bit Manipulation
- Bit Test and Branch Instruction
- Versatile Interrupt Handling
- Versatile Index Register
- Powerful Indexed Addressing for Tables
- Full Set of Conditional Branches
- Memory Usable as Register/Flags
- Single Instruction Memory Examine/Change
- 10 Powerful Addressing Modes
- All Addressing Modes Apply to ROM, RAM, and I/O

USER SELECTABLE OPTIONS

- Internal 8-Bit Timer with Selectable Clock Source (External Timer Input or Internal Machine Clock)
- Timer Prescaler Option (7 Bits, 2^n)
- 8 Bidirectional I/O Lines with TTL or TTL/CMOS Interface Option
- Crystal or Low-Cost Resistor Oscillator Option
- Low Voltage Inhibit Option
- Vectored Interrupts: Timer, Software, and External

DEVICE® is THOMSON SEMICONDUCTEURS' development/emulation tool.

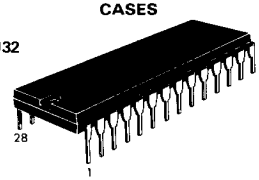
HMOS

HIGH DENSITY
N CHANNEL, SILICON-GATE
DEPLETION LOAD

8-BIT MICROCOMPUTER

CASES

CB-132

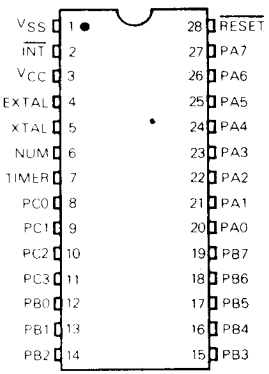


P SUFFIX
PLASTIC PACKAGE

CB-520

FN SUFFIX
PLCC 28

PIN ASSIGNMENT



43 - 45, Avenue de l'Europe 78140 VELIZY-FRANCE Tel. (1) 39.46.97.19 Telex : 240780F

EF6805 FAMILY — MCU CUSTOMER ORDERING SHEET

Commercial reference : E F 6 8 0 5 P 2 _ _ _

Customer's marking : _ _ _ _ _ _ _ _ _ _ _
11 characters max.

Application : .....
.....

ROM capacity required : _ _ _ _ bytes

Temperature range :
- ☐ 0°C/ + 70°C
- ☐ −40°C/ + 85°C
- ☐ −40°C/ + 105°C*

Package :
- ☐ Plastic
- ☐ PLCC

Customer name : .....
Company : .....
Address : .....
Phone : .....

Specification reference :
- ☐ THOMSON SEMICONDUCTEURS reference .....
- ☐ Special customer data reference* .....

Number of interrupt vector : _ _

Quality level :
- ☐ STD
- ☐ D
- ☐ Other* (customer's quality specification ref.) :
  .....

Software developed by :
- ☐ THOMSON SEMICONDUCTEURS application lab.
- ☐ External lab.
- ☐ Customer

PATTERN MEDIA (a listing may be supplied in addition for checking purposes) :
- ☐ EPROM Reference :
- ☐ EFDOS/MDOS* disk file (DEVICE/EXORciser)
  - ☐ 8" floppy
  - ☐ 5" 1/4 floppy
- ☐ Other*

OPTION LIST :

— Oscillator input :
- ☐ Xtal
- ☐ RC

— Low voltage inhibit :
- ☐ Enabled
- ☐ Disabled

— Port A output drive :
- ☐ CMOS and TTL
- ☐ TTL only

— Timer clock source :
- ☐ Internal $\varphi 2$ clock
- ☐ TIMER input pin

— Timer Prescaler
- ☐ 2^0 (divide by 1)
- ☐ 2^1 (divide by 2)
- ☐ 2^2 (divide by 4)
- ☐ 2^3 (divide by 8)
- ☐ 2^4 (divide by 16)
- ☐ 2^5 (divide by 32)
- ☐ 2^6 (divide by 64)
- ☐ 2^7 (divide by 128)

— Internal max. clock frequency :
- ☐ 1.0 MHz
- ☐ 1.5 MHz*
- ☐ 2.0 MHz*

* Requires prior factory approval

Yearly quantity forecast :

- start of production date :
- for a shipment period of :

CUSTOMER CONTACT NAME : DATE : SIGNATURE :

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