

# DON'T REDESIGN ... JUST DROP IN THE HARRIS LINE !!!

| INTEL<br>PART NUMBER | HARRIS<br>PART NUMBER | TYPE OF<br>CROSS | DEVICE<br>TYPE | FUNCTION                   |
|----------------------|-----------------------|------------------|----------------|----------------------------|
| 5962-8773401VA       | MD82C284-10/883       | Direct           | 82C284         | Clock Generator Driver     |
| 5962-8773402VA       | MD82C284-10/883       | Pin-for-Pin      | 82C284         | Clock Generator Driver     |
| 5962-8773403VA       | MD82C284-10/883       | Pin-for-Pin      | 82C284         | Clock Generator Driver     |
| 5962-9067801MXA      | 5962-9067801MXC       | Direct           | 80C286         | 16-Bit CPU                 |
| 8405201QA            | 8405201QA             | Direct           | 80C86          | 16-Bit CPU                 |
| 8405201QA            | MD80C86/883           | Direct           | 80C86          | 16-Bit CPU                 |
| 8405202QA            | 8405202QA             | Direct           | 80C86          | 16-Bit CPU                 |
| 8405202QA            | MD80C86-2/883         | Direct           | 80C86          | 16-Bit CPU                 |
| 8406501JA            | 8406501JA             | Direct           | 82C54          | Prog. Interval Timer       |
| 8406602QA            | 8406602QA             | Direct           | 82C55A         | Prog. Peripheral Interface |
| 8406802VA            | 8406801VA             | Pin-for-Pin      | 82C84          | Clock Generator Driver     |
| MD8086               | 8405201QA             | Pin-for-Pin      | 80C86          | 16-Bit CPU                 |
| MD8086-2             | 8405201QA             | Pin-for-Pin      | 80C86          | 16-Bit CPU                 |
| MD80C86-2/B          | MD80C86-2/B           | Direct           | 80C86          | 16-Bit CPU                 |
| MD80C86/B            | MD80C86/B             | Direct           | 80C86          | 16-Bit CPU                 |
| MD82C284-10/B        | MD82C284-10/883       | Direct           | 82C284         | Clock Generator Driver     |
| MD82C284-6/Q         | MD82C284-10/883       | Pin-for-Pin      | 82C284         | Clock Generator Driver     |
| MD82C284-8/B         | MD82C284-10/883       | Pin-for-Pin      | 82C284         | Clock Generator Driver     |
| MD82C54/Q            | MD82C54/B             | Direct           | 82C54          | Prog. Interval Timer       |
| MD82C55A/Q           | MD82C55A/B            | Direct           | 82C55A         | Prog. Peripheral Interface |
| MG80C286-10/Q        | MG80C286-10/883       | Direct           | 80C286         | 16-Bit CPU                 |

For additional availability options, refer to the reverse side for Harris' complete portfolio of military Microprocessors and Peripherals. In addition to these military devices, Harris offers a wide range of industrial and commercial grades to meet your design requirements.

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HARRIS OFFERS AN EXTENSIVE FAMILY OF MILITARY CPUs AND PERIPHERALS

| DEVICE FUNCTION                            | CERAMIC DIP     |                 |                    | LEADLESS CHIP CARRIER OR SURFACE MOUNT |                 |               |
|--------------------------------------------|-----------------|-----------------|--------------------|----------------------------------------|-----------------|---------------|
|                                            | JANISMD COMP.   | /883 COMPLIANT  | HARRIS ALT.        | JANISMD COMP.                          | /883 COMPLIANT  | HARRIS ALT.   |
| 16 Bit CPU - 5MHz                          | 8405201QA       | MD80C86/883     | MD80C86/7 or /B    | 8405201XA                              | MR80C86/883     | MR80C86/B     |
| 16 Bit CPU - 8MHz                          | 8405202QA       | MD80C86-2/883   | MD80C86-2/B        | 8405202XA                              | MR80C86-2/883   | MR80C86-2/B   |
| 8/16 Bit CPU - 5MHz                        | 5962-8601601QA  | MD80C88/883     | MD80C88/B          | 5962-8601601XA                         | MR80C88/883     | MR80C88/B     |
| 8/16 Bit CPU - 8MHz                        |                 | MD80C88-2/883   | MD80C88-2/B        |                                        | MR80C88-2/883   | MR80C88-2/B   |
| 16 Bit CPU -10MHz (Pin Grid Array)         |                 |                 |                    | 5962-9067801MXC                        | MG80C286-10/883 |               |
| 16 Bit CPU -12MHz (Pin Grid Array)         |                 |                 |                    | 5962-9067802MXC                        | MG80C286-12/883 |               |
| Programmable DMA Controller - 5MHz         | 5962-9054301MQA |                 | MD82C37A-5/B       | 5962-9054301MXA                        |                 | MR82C37A-5/B  |
| Programmable DMA Controller - 8MHz         | 5962-9054302MQA |                 | MD82C37A/B         | 5962-9054302MXA                        |                 | MR82C37A/B    |
| Programmable DMA Controller -12MHz         | 5962-9054303MQA |                 | MD82C37A-12/B      | 5962-9054303MXA                        |                 | MR82C37A-12/B |
| Enhanced Prog. DMA Controller - 8MHz       | 5962-9054304MQA |                 | MD82C237/B         | 5962-9054304MXA                        |                 | MR82C237/B    |
| Enhanced Prog. DMA Controller -12MHz       | 5962-9054305MQA |                 | MD82C237-12/B      | 5962-9054305MXA                        |                 | MR82C237-12/B |
| Async. Communication Element - 5MHz        |                 |                 | MD82C50A-5/B       |                                        |                 |               |
| Serial Controller Interface - 8MHz         | 8501501XA       |                 | MD82C52/7 or /B    | 85015013A                              |                 | MR82C52/B     |
| Programmable Interval Timer - 8MHz         | 8406501JA       |                 | MD82C54/B          | 84065013A                              |                 | MR82C54/B     |
| Programmable Interval Timer - 10MHz        |                 |                 | MD82C54-10/B       |                                        |                 | MR82C54-10/B  |
| Programmable Interval Timer - 12MHz        | 8406502JA       |                 | MD82C54-12/B       | 84065023A                              |                 | MR82C54-12/B  |
| Programmable Periph. Interface - 5MHz      | 8406601QA       |                 | MD82C55A-5/B       | 8406601XA                              |                 | MR82C55A-5/B  |
| Programmable Periph. Interface - 8MHz      | 8406602QA       |                 | MD82C55A/B         | 8406602XA                              |                 | MR82C55A/B    |
| Priority Interrupt Controller - 5MHz       | 5962-8501601YA  |                 | MD82C59A-5/B       | 5962-85016013A                         |                 | MR82C59A-5/B  |
| Priority Interrupt Controller - 8MHz       | 5962-8501602YA  |                 | MD82C59A/7 or /B   | 5962-85016023A                         |                 | MR82C59A/B    |
| Priority Interrupt Controller - 12MHz      |                 |                 | MD82C59A-12/B      |                                        |                 | MR82C59A-12/B |
| Octal Latching Bus Driver - 8MHz           | 8406701RA       |                 | MD82C82/7 or /B    | 84067012A                              |                 | MR82C82/B     |
| Octal Latching Inverting Bus Driver - 8MHz | 8406702RA       |                 | MD82C83H/B         | 84067022A                              |                 | MR82C83H/B    |
| Clock Generator Driver - 8MHz              | 8406801VA       |                 | MD82C84A/7 or /B   | 84068012A                              |                 | MR82C84A/B    |
| Clock Generator Driver - 10MHz             |                 | MD82C284-10/883 |                    |                                        |                 |               |
| Clock Generator Driver - 12MHz             |                 | MD82C284-12/883 |                    |                                        |                 |               |
| Static Clock Controller/Generator - 8MHz   |                 |                 | MD82C85/B          |                                        |                 | MR82C85/B     |
| Octal Bus Transceiver - 5MHz               | 5962-8757701RA  |                 | MD82C86H-5/7 or /B | 5962-87577012A                         |                 | MR82C86H-5/B  |
| Octal Inverting Bus Transceiver - 5MHz     | 5962-8757702RA  |                 | MD82C87H-5/B       | 5962-87577022A                         |                 | MR82C87H-5/B  |
| Bus Controller - 8MHz                      | 8406901RA       |                 | MD82C88/7 or /B    | 84069012A                              |                 | MR82C88/B     |
| Bus Controller - 10MHz                     | 8406902RA       |                 |                    |                                        |                 |               |
| Bus Arbiter - 8MHz                         | 5962-8552801RA  |                 | MD82C89/B          | 5962-85528012A                         |                 | MR82C89/B     |

NOTE: With the exception of the /7 product (which are compliant versions), Harris alternate ("ALT") part numbers are non-compliant versions of the same device type/function.

HARRIS PART NUMBER NOMENCLATURE GUIDE

**TEMPERATURE RANGE**

C: 0°C to 70°C  
I: -40°C to 85°C  
M: -55°C to 125°C

**PACKAGE DESIGNATOR**

P: Dual-In-Line Plastic (PDIP)  
D: Ceramic Dual-In-Line Frit-Seal (CERDIP)  
or Ceramic Dual-In-Line Metal Seal (SBDIP)  
G: Ceramic Pin Grid Array (CPGA)  
R: Ceramic Leadless Chip Carrier (CLCC)  
S: Plastic Leaded Chip Carrier (PLCC)  
M: Small Outline Plastic (SOIC)

**PART NUMBER**

80CXXX: CMOS Microprocessors  
82CXXX: CMOS Peripherals

**SPEED DESIGNATION**

**Peripherals**  
-5: 5MHz  
Blank: 8MHz  
-10: 10MHz  
-12: 12MHz

**μProcessors**  
Blank: 5MHz  
-2: 8MHz  
-10: 10MHz  
-12: 12MHz  
-20: 20MHz  
-25: 25MHz

**SUFFIX**

/B: -55°C to 125°C with Burn-In  
/883: Current Rev Compliant  
/7: Thin EPI, Current Rev 883 Compliant

For complete, current, and detailed technical specifications, pricing, and availability on any Harris devices, please contact the nearest Harris sales, representative, or distributor office.

HARRIS AUTHORIZED MILITARY DISTRIBUTORS

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