

| REVISIONS |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |                |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------|
| LTR       | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DATE     | APPROVED       |
| A         | Add six new device types for vendor CAGE number 65786. Add vendor CAGE number 1FN41 as a source of supply for devices 01KX, 02KX, 03KX, and 04KX. Change to vendor similar part number for vendor CAGE number 1FN41. Change to margin test method A for vendor CAGE number 66579. Remove 4.5.1, 4.5.2, 4.5.3, figures 5 and 6, and table III from drawing. Change to parameters $t_{CS}$ and $t_{DF}$ in table I. Change to figures 2 and 3. Editorial changes throughout. | 93-01-21 | M. A. Frye     |
| B         | 5 year review and update. Changed input capacitance from 6 pF to 10 pF. ksr                                                                                                                                                                                                                                                                                                                                                                                                | 06-06-06 | Raymond Monnin |

THE ORIGINAL FIRST PAGE OF THIS DRAWING HAS BEEN REPLACED.

|                                                                                                                                                                                |  |  |  |                                   |  |   |   |   |                                                                                                                                            |                    |            |   |   |   |    |    |    |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|-----------------------------------|--|---|---|---|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------|---|---|---|----|----|----|--|--|
| REV                                                                                                                                                                            |  |  |  |                                   |  |   |   |   |                                                                                                                                            |                    |            |   |   |   |    |    |    |  |  |
| SHEET                                                                                                                                                                          |  |  |  |                                   |  |   |   |   |                                                                                                                                            |                    |            |   |   |   |    |    |    |  |  |
| REV                                                                                                                                                                            |  |  |  |                                   |  |   |   |   |                                                                                                                                            |                    |            |   |   |   |    |    |    |  |  |
| SHEET                                                                                                                                                                          |  |  |  |                                   |  |   |   |   |                                                                                                                                            |                    |            |   |   |   |    |    |    |  |  |
| REV STATUS<br>OF SHEETS                                                                                                                                                        |  |  |  | REV                               |  | B | B | B | B                                                                                                                                          | B                  | B          | B | B | B | B  | B  | B  |  |  |
|                                                                                                                                                                                |  |  |  | SHEET                             |  | 1 | 2 | 3 | 4                                                                                                                                          | 5                  | 6          | 7 | 8 | 9 | 10 | 11 | 12 |  |  |
| PMIC N/A                                                                                                                                                                       |  |  |  | PREPARED BY<br>Kenneth Rice       |  |   |   |   | <b>DEFENSE SUPPLY CENTER COLUMBUS</b><br><b>COLUMBUS, OHIO 43218-3990</b><br><a href="http://www.dscc.dla.mil">http://www.dscc.dla.mil</a> |                    |            |   |   |   |    |    |    |  |  |
| <b>STANDARD<br/>MICROCIRCUIT<br/>DRAWING</b><br><br>THIS DRAWING IS<br>AVAILABLE FOR USE BY<br>ALL DEPARTMENTS<br>AND AGENCIES OF THE<br>DEPARTMENT OF DEFENSE<br><br>AMSC N/A |  |  |  | CHECKED BY<br>Charles Reusing     |  |   |   |   |                                                                                                                                            |                    |            |   |   |   |    |    |    |  |  |
|                                                                                                                                                                                |  |  |  | APPROVED BY<br>Michael A. Frye    |  |   |   |   | <b>MICROCIRCUIT, MEMORY,<br/>DIGITAL, CMOS, 8K X 8 UV<br/>EPROM, MONOLITHIC SILICON</b>                                                    |                    |            |   |   |   |    |    |    |  |  |
|                                                                                                                                                                                |  |  |  | DRAWING APPROVAL DATE<br>88-06-21 |  |   |   |   |                                                                                                                                            |                    |            |   |   |   |    |    |    |  |  |
|                                                                                                                                                                                |  |  |  | REVISION LEVEL<br>B               |  |   |   |   | SIZE<br>A                                                                                                                                  | CAGE CODE<br>67268 | 5962-87515 |   |   |   |    |    |    |  |  |
|                                                                                                                                                                                |  |  |  |                                   |  |   |   |   |                                                                                                                                            | SHEET 1 OF 12      |            |   |   |   |    |    |    |  |  |

## 1. SCOPE

1.1 Scope. This drawing describes device requirements for MIL-STD-883 compliant, non-JAN class level B microcircuits in accordance with MIL-PRF-38535, appendix A.

1.2 Part or Identifying Number (PIN). The complete PIN shall be as shown in the following example:

|                   |                            |                             |                            |
|-------------------|----------------------------|-----------------------------|----------------------------|
| <u>5962-87515</u> | <u>01</u>                  | <u>J</u>                    | <u>A</u>                   |
| Drawing number    | Device type<br>(see 1.2.1) | Case outline<br>(see 1.2.2) | Lead finish<br>(see 1.2.3) |

1.2.1 Device type(s). The device type(s) shall identify the circuit function as follows:

| Device type | Generic number 1/ | Circuit function | Access time |
|-------------|-------------------|------------------|-------------|
| 01          |                   | 8K x 8 UV EPROM  | 45 ns       |
| 02          |                   | 8K x 8 UV EPROM  | 55 ns       |
| 03          |                   | 8K x 8 UV EPROM  | 70 ns       |
| 04          |                   | 8K x 8 UV EPROM  | 90 ns       |
| 05          |                   | 8K x 8 UV EPROM  | 45 ns       |
| 06          |                   | 8K x 8 UV EPROM  | 55 ns       |
| 07          |                   | 8K x 8 UV EPROM  | 35 ns       |
| 08          |                   | 8K x 8 UV EPROM  | 35 ns       |
| 09          |                   | 8K x 8 UV EPROM  | 45 ns       |
| 10          |                   | 8K x 8 UV EPROM  | 55 ns       |
| 11          |                   | 8K x 8 UV EPROM  | 25 ns       |
| 12          |                   | 8K x 8 UV EPROM  | 25 ns       |

1.2.2 Case outline(s). The case outline(s) shall be as designated in MIL-STD-1835, and as follows:

| Outline letter | Descriptive designator | Terminals | Package style                   |
|----------------|------------------------|-----------|---------------------------------|
| J              | GDIP1-T24 OR CDIP2-T24 | 24        | Dual-in-line 2/                 |
| K              | GDFP2-F24 OR CDFP3-F24 | 24        | Flat pack 2/                    |
| L              | GDIP3-T24 OR CDIP4-T24 | 24        | Dual-in-line 2/                 |
| 3              | CQCC1-N28              | 28        | Square leadless chip carrier 2/ |

1.2.3 Lead finish. The lead finish is as specified in MIL-PRF-38535, appendix A.

## 1.3 Absolute maximum ratings.

|                                                               |                         |
|---------------------------------------------------------------|-------------------------|
| Storage temperature .....                                     | -65°C to +150°C         |
| Voltages on any pin with respect to ground .....              | -0.5 V dc to +7.0 V dc  |
| V <sub>PP</sub> with respect to ground .....                  | -0.5 V dc to +14.0 V dc |
| Maximum power dissipation (P <sub>D</sub> ) 3/ .....          | 1 W                     |
| Lead temperature (soldering, 10 seconds) .....                | +300°C                  |
| Thermal resistance, junction-to-case (Θ <sub>JC</sub> ) ..... | MIL-STD-1835            |
| Junction temperature (T <sub>J</sub> ) 4/ .....               | +150°C                  |

## 1.4 Recommended operating conditions. 1/

|                                                    |                        |
|----------------------------------------------------|------------------------|
| Case operating temperature (T <sub>C</sub> ) ..... | -55°C to +125°C        |
| Supply voltage (V <sub>CC</sub> ) .....            | +4.5 V dc to +5.5 V dc |

1/ Generic numbers are listed on the Standardized Microcircuit Drawing Bulletin at the end of this document and will also be listed in MIL-HDBK-103.

2/ Lid shall be transparent to permit ultraviolet light erasure.

3/ Must withstand the added P<sub>D</sub> due to short circuit test, e.g., I<sub>OS</sub>.

4/ Maximum junction temperature shall not be exceeded except for allowable short duration burn-in screening conditions in accordance with method 5004 of MIL-STD-883.

|                                                                                                                     |                   |                             |                    |
|---------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------|--------------------|
| <b>STANDARD<br/>MICROCIRCUIT DRAWING</b><br><br><b>DEFENSE SUPPLY CENTER COLUMBUS<br/>COLUMBUS, OHIO 43218-3990</b> | <b>SIZE<br/>A</b> |                             | <b>5962-87515</b>  |
|                                                                                                                     |                   | <b>REVISION LEVEL<br/>B</b> | <b>SHEET<br/>2</b> |

## 2. APPLICABLE DOCUMENTS

2.1 Government specification, standards, and handbooks. The following specification, standards, and handbooks form a part of this drawing to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

### DEPARTMENT OF DEFENSE SPECIFICATION

MIL-PRF-38535 - Integrated Circuits, Manufacturing, General Specification for.

### DEPARTMENT OF DEFENSE STANDARDS

MIL-STD-883 - Test Method Standard Microcircuits.

MIL-STD-1835 - Interface Standard Electronic Component Case Outlines.

### DEPARTMENT OF DEFENSE HANDBOOKS

MIL-HDBK-103 - List of Standard Microcircuit Drawings.

MIL-HDBK-780 - Standard Microcircuit Drawings.

(Copies of these documents are available online at <http://assist.daps.dla.mil/quicksearch/> or <http://assist.daps.dla.mil> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.2 Order of precedence. In the event of a conflict between the text of this drawing and the references cited herein, the text of this drawing takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

## 3. REQUIREMENTS

3.1 Item requirements The individual item requirements shall be in accordance with MIL-PRF-38535, appendix A for non-JAN class level B devices and as specified herein. Product built to this drawing that is produced by a Qualified Manufacturer Listing (QML) certified and qualified manufacturer or a manufacturer who has been granted transitional certification to MIL-PRF-38535 may be processed as QML product in accordance with the manufacturer's approved program plan and qualifying activity approval in accordance with MIL-PRF-38535. This QML flow as documented in the Quality Management (QM) plan may make modifications to the requirements herein. These modifications shall not affect the PIN as described herein. A "Q" or "QML" certification mark in accordance with MIL-PRF-38535 is required to identify when the QML flow option is used.

3.2 Design, construction, and physical dimensions. The design, construction, and physical dimensions shall be as specified in MIL-PRF-38535, appendix A and herein.

3.2.1 Case outlines. The case outlines shall be in accordance with 1.2.2 herein.

3.2.2 Terminal connections. The terminal connections shall be as specified on figure 1.

3.2.3 Truth table. The truth table shall be as specified on figure 2.

3.2.3.1 Unprogrammed or erased devices. The truth table for unprogrammed devices for contracts involving no altered item drawing shall be as specified on figure 2. When required in groups A, B, or C inspection (see 4.3), the devices shall be programmed by the manufacturer prior to test in a checkerboard pattern or equivalent (a minimum of 50 percent of the total number of bits programmed) or to any altered item drawing pattern which includes at least 25 percent of the total numbers of bits programmed.

3.2.3.2 Programmed devices. The truth table for programmed devices shall be as specified by an attached altered item drawing.

3.3 Electrical performance characteristics. Unless otherwise specified herein, the electrical performance characteristics are as specified in table I and shall apply over the full case operating temperature range.

3.4 Electrical test requirements. The electrical test requirements shall be the subgroups specified in table II. The electrical tests for each subgroup are described in table I.

|                                                                                                                     |                   |                             |                    |
|---------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------|--------------------|
| <b>STANDARD<br/>MICROCIRCUIT DRAWING</b><br><br><b>DEFENSE SUPPLY CENTER COLUMBUS<br/>COLUMBUS, OHIO 43218-3990</b> | <b>SIZE<br/>A</b> |                             | <b>5962-87515</b>  |
|                                                                                                                     |                   | <b>REVISION LEVEL<br/>B</b> | <b>SHEET<br/>3</b> |

TABLE I. Electrical performance characteristics.

| Test                                           | Symbol           | Conditions<br>-55°C ≤ T <sub>C</sub> ≤ +125°C<br>V <sub>SS</sub> = 0 V 4.5 V ≤ V <sub>CC</sub> ≤ 5.5 V<br>unless otherwise specified | Group A<br>subgroups | Device<br>types | Limits |      | Unit |
|------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--------|------|------|
|                                                |                  |                                                                                                                                      |                      |                 | Min    | Max  |      |
| Input leakage current                          | I <sub>LI</sub>  | V <sub>IN</sub> = 5.5 V and GND                                                                                                      | 1,2,3                | All             |        | ±10  | μA   |
| Output leakage current                         | I <sub>LO</sub>  | V <sub>OUT</sub> = 5.5 V and GND                                                                                                     | 1,2,3                | All             |        | ±10  | μA   |
| Operating supply<br>current (active) <u>1/</u> | I <sub>CC1</sub> | CS = V <sub>IL</sub> , V <sub>CC</sub> = 5.5 V<br>D0 to D7 = 0 mA<br>f = max                                                         | 1,2,3                | 01-10           |        | 120  | mA   |
|                                                |                  |                                                                                                                                      |                      | 11-12           |        | 140  |      |
| Standby current,<br>TTL inputs                 | I <sub>CC2</sub> | CS = 2.0 V, V <sub>CC</sub> = 5.5 V                                                                                                  | 1,2,3                | 01-07           |        | 40   | mA   |
|                                                |                  |                                                                                                                                      |                      | 12              |        | 50   |      |
| Standby current,<br>CMOS inputs                | I <sub>CC3</sub> | V <sub>CC</sub> = 5.5 V, CS = V <sub>CC</sub> - 0.3 V                                                                                | 1,2,3                | 01-07           |        | 40   | mA   |
|                                                |                  |                                                                                                                                      |                      | 12              |        | 50   |      |
| Input low voltage                              | V <sub>IL</sub>  | V <sub>CC</sub> = 4.5 V and 5.5 V                                                                                                    | 1,2,3                | All             |        | 0.8  | V    |
| Input high voltage                             | V <sub>IH</sub>  | V <sub>CC</sub> = 4.5 V and 5.5 V                                                                                                    | 1,2,3                | All             | 2.0    |      | V    |
| Output voltage low                             | V <sub>OL</sub>  | V <sub>CC</sub> = 4.5 V,<br>V <sub>IH</sub> = 2.0 V,<br>V <sub>IL</sub> = 0.8 V                                                      | 1,2,3                | 01-10           |        | 0.45 | V    |
|                                                |                  |                                                                                                                                      |                      | 11,12           |        | 0.4  |      |
| Output voltage high                            | V <sub>OH</sub>  | V <sub>CC</sub> = 4.5 V,<br>V <sub>IH</sub> = 2.0 V,<br>V <sub>IL</sub> = 0.8 V                                                      | 1,2,3                | 01-10           | 2.4    |      | V    |
|                                                |                  |                                                                                                                                      |                      | 11,12           |        |      |      |
| Output short circuit<br>current <u>2/ 3/</u>   | I <sub>OS</sub>  | V <sub>O</sub> = GND                                                                                                                 | 1,2,3                | All             |        | -100 | mA   |
| Input capacitance <u>3/</u>                    | C <sub>IN</sub>  | f = 1.0 MHz<br>T <sub>C</sub> = +25°C<br>See 4.3.1e                                                                                  | 4                    | All             |        | 10   | pF   |
| Output capacitance <u>3/</u>                   | C <sub>OUT</sub> | V <sub>CC</sub> = 5.5 V                                                                                                              |                      |                 |        | 12   |      |

See footnotes at end of table.

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TABLE I. Electrical performance characteristics - Continued.

| Test                                           | Symbol           | Conditions<br>-55°C ≤ T <sub>C</sub> ≤ +125°C<br>V <sub>SS</sub> = 0 V 4.5 V ≤ V <sub>CC</sub> ≤ 5.5 V<br>unless otherwise specified | Group A<br>subgroups | Device<br>types | Limits |     | Unit |
|------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|--------|-----|------|
|                                                |                  |                                                                                                                                      |                      |                 | Min    | Max |      |
| Address to output<br>delay                     | t <sub>ACC</sub> | V <sub>CC</sub> = 4.5 V<br>See figures 3 and 4                                                                                       | 9,10,11              | 11,12           |        | 25  | ns   |
|                                                |                  |                                                                                                                                      |                      | 07,08           |        | 35  |      |
|                                                |                  |                                                                                                                                      |                      | 01,05           |        |     |      |
|                                                |                  |                                                                                                                                      |                      | 09              |        | 45  |      |
|                                                |                  |                                                                                                                                      |                      | 02,06           |        |     |      |
|                                                |                  |                                                                                                                                      |                      | 10              |        | 55  |      |
|                                                |                  |                                                                                                                                      |                      | 03              |        | 70  |      |
|                                                |                  |                                                                                                                                      |                      | 04              |        | 90  |      |
| CS to output delay                             | t <sub>CS</sub>  |                                                                                                                                      | 9,10,11              | 11              |        | 15  | ns   |
|                                                |                  |                                                                                                                                      |                      | 08              |        | 20  |      |
|                                                |                  |                                                                                                                                      |                      | 12              |        | 25  |      |
|                                                |                  |                                                                                                                                      |                      | 09              |        | 30  |      |
|                                                |                  |                                                                                                                                      |                      | 01,02           |        |     |      |
|                                                |                  |                                                                                                                                      |                      | 10              |        | 35  |      |
|                                                |                  |                                                                                                                                      |                      | 07              |        | 40  |      |
|                                                |                  |                                                                                                                                      |                      | 05              |        | 45  |      |
| CS high to output<br>float <u>3/</u> <u>4/</u> | t <sub>DF</sub>  |                                                                                                                                      | 9,10,11              | 03,04,<br>06    |        | 55  | ns   |
|                                                |                  |                                                                                                                                      |                      | 11              |        | 15  |      |
|                                                |                  |                                                                                                                                      |                      | 08,12           |        | 25  |      |
|                                                |                  |                                                                                                                                      |                      | 09              |        | 30  |      |
|                                                |                  |                                                                                                                                      |                      | 01,02           |        |     |      |
|                                                |                  |                                                                                                                                      |                      | 07,10           |        | 35  |      |
|                                                |                  |                                                                                                                                      |                      | 05              |        | 45  |      |
|                                                |                  |                                                                                                                                      |                      | 03,04,<br>06    |        | 55  |      |
| Address to output hold<br><u>3/</u>            | t <sub>OH</sub>  |                                                                                                                                      | 9,10,11              | All             | 0      |     | ns   |

1/ TTL inputs: V<sub>IL</sub> ≤ 0.8 V, V<sub>IH</sub> ≥ 2.0 V.

2/ Not more than one output should be shorted at a time, and short circuit test (I<sub>OS</sub>) should not exceed 30 seconds.

3/ Tested initially and after any design or process changes which may affect that parameter, and therefore shall be guaranteed to the limits specified in table I.

4/ Transition is measured at steady-state high level -500 mV or steady-state low level +500 mV on the output from the 1.5 V level on the input with the output load in figure 3, circuit B.

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**SIZE  
A**

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|                 |                 |                 |
|-----------------|-----------------|-----------------|
| Device types    | All             |                 |
| Case outlines   | J, K, L         | 3               |
| Terminal number | Terminal symbol |                 |
| 1               | A <sub>7</sub>  | NC              |
| 2               | A <sub>6</sub>  | A <sub>7</sub>  |
| 3               | A <sub>5</sub>  | A <sub>6</sub>  |
| 4               | A <sub>4</sub>  | A <sub>5</sub>  |
| 5               | A <sub>3</sub>  | A <sub>4</sub>  |
| 6               | A <sub>2</sub>  | A <sub>3</sub>  |
| 7               | A <sub>1</sub>  | A <sub>2</sub>  |
| 8               | A <sub>0</sub>  | A <sub>1</sub>  |
| 9               | O <sub>0</sub>  | A <sub>0</sub>  |
| 10              | O <sub>1</sub>  | NC              |
| 11              | O <sub>2</sub>  | O <sub>0</sub>  |
| 12              | GND             | O <sub>1</sub>  |
| 13              | O <sub>3</sub>  | O <sub>2</sub>  |
| 14              | O <sub>4</sub>  | GND             |
| 15              | O <sub>5</sub>  | NC              |
| 16              | O <sub>6</sub>  | O <sub>3</sub>  |
| 17              | O <sub>7</sub>  | O <sub>4</sub>  |
| 18              | A <sub>12</sub> | O <sub>5</sub>  |
| 19              | A <sub>11</sub> | O <sub>6</sub>  |
| 20              | $\overline{CS}$ | O <sub>7</sub>  |
| 21              | A <sub>10</sub> | NC              |
| 22              | A <sub>9</sub>  | A <sub>12</sub> |
| 23              | A <sub>8</sub>  | A <sub>11</sub> |
| 24              | V <sub>CC</sub> | $\overline{CS}$ |
| 25              | ---             | A <sub>10</sub> |
| 26              | ---             | A <sub>9</sub>  |
| 27              | ---             | A <sub>8</sub>  |
| 28              | ---             | V <sub>CC</sub> |

FIGURE 1. Terminal connections.

|                                                                                                                     |                   |                             |                    |
|---------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------|--------------------|
| <b>STANDARD<br/>MICROCIRCUIT DRAWING</b><br><br><b>DEFENSE SUPPLY CENTER COLUMBUS<br/>COLUMBUS, OHIO 43218-3990</b> | <b>SIZE<br/>A</b> |                             | <b>5962-87515</b>  |
|                                                                                                                     |                   | <b>REVISION LEVEL<br/>B</b> | <b>SHEET<br/>6</b> |

| Mode               | V <sub>CC</sub> | $\overline{\text{CS}} / V_{\text{PP}}$ | O <sub>0</sub> – O <sub>7</sub> |
|--------------------|-----------------|----------------------------------------|---------------------------------|
| Read               | 5 V $\pm$ 10%   | V <sub>IL</sub>                        | FF H                            |
| Output disable     | 5 V $\pm$ 10%   | V <sub>IH</sub>                        | High Z                          |
| Program <u>1</u> / | V <sub>CC</sub> | V <sub>PP</sub>                        | Data in                         |
| Verify <u>1</u> /  | V <sub>CC</sub> | V <sub>IL</sub>                        | Programmed byte                 |

1/ See 4.5 herein.

Device types 01 - 04

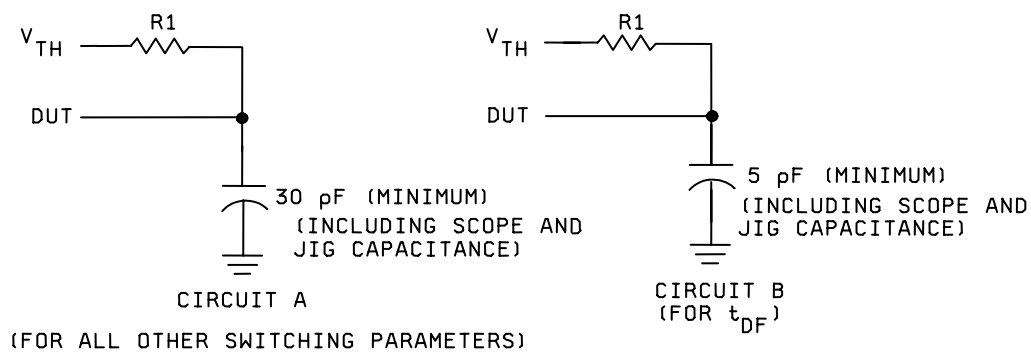
| Type         | Mode                          | Outputs | A <sub>12</sub>  | A <sub>11</sub> | $\overline{\text{CS}}$ | A <sub>10</sub> | A <sub>9</sub>   | A <sub>8</sub>   | V <sub>CC</sub> | Power                                  |
|--------------|-------------------------------|---------|------------------|-----------------|------------------------|-----------------|------------------|------------------|-----------------|----------------------------------------|
| All          | Read                          | DOUT    | A <sub>12</sub>  | A <sub>11</sub> | V <sub>IL</sub>        | A <sub>10</sub> | A <sub>9</sub>   | A <sub>8</sub>   | V <sub>CC</sub> | I <sub>CC1</sub>                       |
| 05-07,<br>12 | Not<br>selected               | High-Z  | A <sub>12</sub>  | A <sub>11</sub> | V <sub>IH</sub>        | A <sub>10</sub> | A <sub>9</sub>   | A <sub>8</sub>   | V <sub>CC</sub> | I <sub>CC2</sub> ,<br>I <sub>CC3</sub> |
| 08-11        | Not<br>selected               | High-Z  | A <sub>12</sub>  | A <sub>11</sub> | V <sub>IH</sub>        | A <sub>10</sub> | A <sub>9</sub>   | A <sub>8</sub>   | V <sub>CC</sub> | I <sub>CC1</sub>                       |
| All          | Program <u>1</u> /            | DIN     | V <sub>ILP</sub> | V <sub>PP</sub> | V <sub>ILP</sub>       | Latch           | V <sub>ILP</sub> | V <sub>IHP</sub> | V <sub>CC</sub> | I <sub>CC1</sub>                       |
| All          | Program<br>inhibit <u>1</u> / | High-Z  | V <sub>ILP</sub> | V <sub>PP</sub> | V <sub>ILP</sub>       | Latch           | V <sub>IHP</sub> | V <sub>IHP</sub> | V <sub>CC</sub> | I <sub>CC1</sub>                       |
| All          | Program<br>verify <u>1</u> /  | DOUT    | V <sub>ILP</sub> | V <sub>PP</sub> | V <sub>ILP</sub>       | Latch           | V <sub>IHP</sub> | V <sub>ILP</sub> | V <sub>CC</sub> | I <sub>CC1</sub>                       |
| All          | Blank<br>check <u>1</u> /     | DOUT    | V <sub>ILP</sub> | V <sub>PP</sub> | V <sub>ILP</sub>       | Latch           | V <sub>IHP</sub> | V <sub>ILP</sub> | V <sub>CC</sub> | I <sub>CC1</sub>                       |

1/ See 4.5 herein.

Device types 05- 12

FIGURE 2. Truth tables.

|                                                                                                                     |                   |                             |                    |
|---------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------|--------------------|
| <b>STANDARD<br/>MICROCIRCUIT DRAWING</b><br><br><b>DEFENSE SUPPLY CENTER COLUMBUS<br/>COLUMBUS, OHIO 43218-3990</b> | <b>SIZE<br/>A</b> |                             | <b>5962-87515</b>  |
|                                                                                                                     |                   | <b>REVISION LEVEL<br/>B</b> | <b>SHEET<br/>7</b> |



|          | Device types |              |
|----------|--------------|--------------|
|          | 01 – 10      | 11,12        |
| $R_1$    | 98 $\Omega$  | 250 $\Omega$ |
| $V_{TH}$ | 2.01 V       | 1.9 V        |

FIGURE 3. Output load circuits or equivalent circuit.

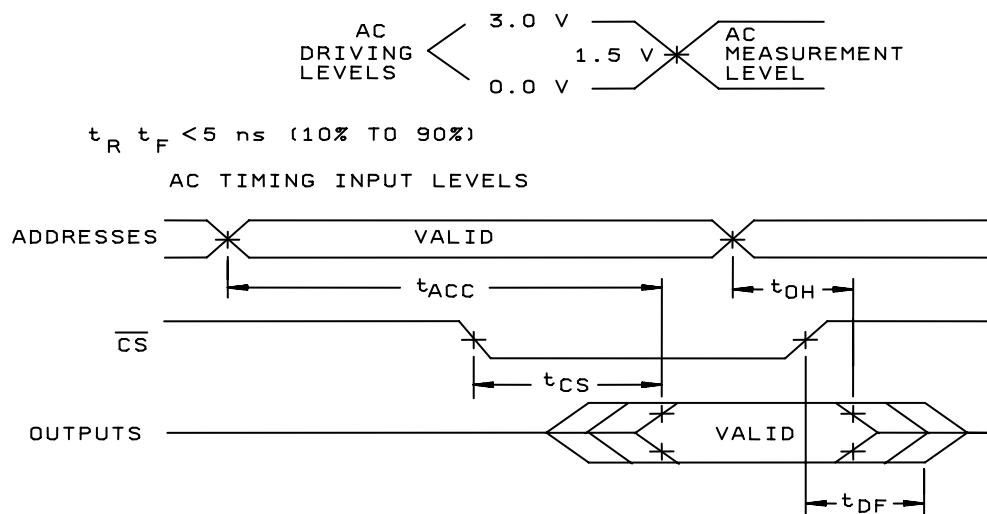


FIGURE 4. AC read timing diagram.

|                                                                                                                     |                   |                             |                    |
|---------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------|--------------------|
| <b>STANDARD<br/>MICROCIRCUIT DRAWING</b><br><br><b>DEFENSE SUPPLY CENTER COLUMBUS<br/>COLUMBUS, OHIO 43218-3990</b> | <b>SIZE<br/>A</b> |                             | <b>5962-87515</b>  |
|                                                                                                                     |                   | <b>REVISION LEVEL<br/>B</b> | <b>SHEET<br/>8</b> |



3.5 Marking. Marking shall be in accordance with MIL-PRF-38535, appendix A. The part shall be marked with the PIN listed in 1.2 herein. In addition, the manufacturer's PIN may also be marked. For packages where the entire SMD PIN number is not feasible due to space limitations, the manufacturer has the option of not marking the "5962-" on the device.

3.5.1 Certification/compliance mark. A compliance indicator "C" shall be marked on all non-JAN devices built in compliance to MIL-PRF-38535, appendix A. The compliance indicator "C" shall be replaced with a "Q" or "QML" certification mark in accordance with MIL-PRF-38535 to identify when the QML flow option is used.

3.6 Processing EPROMS. All testing requirements and quality assurance provisions herein shall be satisfied by the manufacturer prior to delivery.

3.6.1 Erase of EPROMS. When specified, devices shall be erased in accordance with the procedures and characteristics specified in 4.4 herein.

3.6.2 Programmability of EPROMS. When specified, devices shall be programmed to the specified pattern using the procedures and characteristics specified in 4.5 herein.

3.6.3 Verification of erasure of programmed EPROMS. When specified, devices shall be verified as either programmed (see 4.5 herein) to specified program or erased (see 4.4 herein). As a minimum, verification shall consist of performing a functional test (subgroup 7) to verify that all bits are in the proper state. Any bit that does not verify to be in the proper state shall constitute a device failure, and shall be removed from the lot.

3.7 Certificate of compliance. A certificate of compliance shall be required from a manufacturer in order to be listed as an approved source of supply in MIL-HDBK-103 (see 6.6 herein). The certificate of compliance submitted to DSCC-VA prior to listing as an approved source of supply shall affirm that the manufacturer's product meets the requirements of MIL-PRF-38535, appendix A and the requirements herein.

3.8 Certificate of conformance. A certificate of conformance as required in MIL-PRF-38535, appendix A shall be provided with each lot of microcircuits delivered to this drawing.

3.9 Notification of change. Notification of change to DSCC-VA shall be required for any change that affects this drawing.

3.10 Verification and review. DSCC, DSCC's agent, and the acquiring activity retain the option to review the manufacturer's facility and applicable required documentation. Offshore documentation shall be made available onshore at the option of the reviewer.

#### 4. VERIFICATION

4.1 Sampling and inspection. Sampling and inspection procedures shall be in accordance with MIL-PRF-38535, appendix A.

4.2 Screening. Screening shall be in accordance with method 5004 of MIL-STD-883, and shall be conducted on all devices prior to quality conformance inspection. The following additional criteria shall apply:

a. Burn-in test (method 1015 of MIL-STD-883).

(1) Test condition C or D. The test circuit shall be maintained by the manufacturer under document revision level control and shall be made available to the preparing or procuring activity upon request. The test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in method 1015 of MIL-STD-883.

(2)  $T_A = +125^{\circ}\text{C}$ , minimum.

b. Interim and final electrical test parameters shall be as specified in table II herein, except interim electrical parameter tests prior to burn-in are optional at the discretion of the manufacturer.

c. A data retention stress shall be included as part of the screening procedure and shall consist of the following steps:

Margin test method A. \* Steps 1 through 3 may be performed at wafer level.

(1) At  $+25^{\circ}\text{C}$ , program greater than 95 percent of the bit locations, including the slowest programming cell. The remaining bits shall provide a worse case speed pattern.

|                                                                                                                     |                   |                             |                    |
|---------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------|--------------------|
| <b>STANDARD<br/>MICROCIRCUIT DRAWING</b><br><br><b>DEFENSE SUPPLY CENTER COLUMBUS<br/>COLUMBUS, OHIO 43218-3990</b> | <b>SIZE<br/>A</b> |                             | <b>5962-87515</b>  |
|                                                                                                                     |                   | <b>REVISION LEVEL<br/>B</b> | <b>SHEET<br/>9</b> |

- (2) Bake, unbiased, for 72 hours at +140°C or for 48 hours at +150°C or for 8 hours at +200°C or 48 hours at 225°C (unassembled devices only).
- (3) At +25°C, perform a margin test using  $V_m = +5.8$  V to loose timing (i.e.,  $t_{ACC} = 1$   $\mu$ s).
- (4) Perform dynamic burn-in in accordance with 4.2a.
- (5) At +25°C, perform a margin test using  $V_m = +5.8$  V.
- (6) Perform electrical test in accordance with 4.2b.
- (7) Erase in accordance with 3.6.1. Devices may be submitted to quality conformance inspection.
- (8) Verify erasure in accordance with 3.6.3.

#### Margin test method B.

- (1) Program at +25°C greater than 95 percent of the bit locations, including the slowest programming cell. The remaining cells shall provide a worst case speed pattern.
- (2) Bake, unbiased, for 72 hours at +140°C or for 48 hours at +150°C or for 8 hours at +200°C or for 2 hours at +300°C for unassembled devices only.
- (3) Perform margin test using  $V_m = +5.55$  V and  $V_m = +4.40$  V at +25°C using loose timing (i.e.,  $t_{ACC} = 1$   $\mu$ s).
- (4) Erase (see 3.6.1).
- (4a) Steps 1 through 4 may be performed at the wafer level. The maximum storage temperature shall not exceed +200°C for packaged devices or +300°C for unassembled devices.
- (5) Program at +25°C with a 50 percent pattern (checkerboard or equivalent).
- (6) Perform margin test using  $V_m = +5.75$  V and  $V_m = +4.40$  V at +25°C with loose timing.
- (7) Perform dynamic burn-in in accordance with 4.2a.
- (8) Perform margin test using  $V_m = +5.55$  V and  $V_m = +4.40$  V at +25°C using loose timing.
- (9) Perform electrical tests (see 4.2b).
- (10) Erase (see 3.6.1), except devices submitted for groups A, B, C, and D testing.
- (11) Verify erasure (see 3.6.3).

4.3 Quality conformance inspection. Quality conformance inspection shall be in accordance with method 5005 of MIL-STD-883 including groups A, B, C, and D inspections. The following additional criteria shall apply.

#### 4.3.1 Group A inspection.

- a. Tests shall be as specified in table II herein.
- b. Subgroups 5 and 6 in table I, method 5005 of MIL-STD-883 shall be omitted.
- c. All devices selected for testing shall be programmed with a checkerboard pattern or equivalent. After completion of all testing, the devices shall be erased and verified except devices being submitted to groups B, C, and D testing.
- d. As a minimum, subgroups 7 and 8 shall consist of verifying the EPROM pattern specified.

|                                                                                                                     |                   |                             |                     |
|---------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------|---------------------|
| <b>STANDARD<br/>MICROCIRCUIT DRAWING</b><br><br><b>DEFENSE SUPPLY CENTER COLUMBUS<br/>COLUMBUS, OHIO 43218-3990</b> | <b>SIZE<br/>A</b> |                             | <b>5962-87515</b>   |
|                                                                                                                     |                   | <b>REVISION LEVEL<br/>B</b> | <b>SHEET<br/>10</b> |

- e. Subgroup 4 ( $C_{IN}$  and  $C_{OUT}$  measurements) shall be measured only for the initial test and after process or design changes which may affect capacitance.

#### 4.3.2 Groups C and D inspections.

- a. End-point electrical parameters shall be as specified in table II herein.
- b. Steady-state life test conditions, method 1005 of MIL-STD-883.
- (1) Test condition C or D. The test circuit shall be maintained by the manufacturer under document revision level control and shall be made available to the preparing or procuring activity upon request. The test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in method 1005 of MIL-STD-883.
  - (2)  $T_A = +125^\circ\text{C}$ , minimum.
  - (3) Test duration: 1,000 hours, except as permitted by method 1005 of MIL-STD-883.
- c. All devices submitted for testing shall be programmed with a checkerboard pattern or equivalent. After completion of all testing, the devices shall be erased and verified.

4.4 Erasing procedure. The recommended erasure procedure for the device is exposure to shortwave ultraviolet light which has a wavelength of 2537 angstroms ( $\text{\AA}$ ). The integrated dose (i.e., UV intensity x exposure time) for erasure should be a minimum of  $25 \text{ Ws/cm}^2$ . The erasure time with this dosage is approximately 35 minutes using a ultraviolet lamp with a  $12,000 \text{ }\mu\text{W/cm}^2$  power rating. The device should be placed within one inch of the lamp tubes during erasure. The maximum integrated dose the device can be exposed to without damage is  $7258 \text{ Ws/cm}^2$  (1 week at  $12,000 \text{ }\mu\text{W/cm}^2$ ). Exposure of EPROMS to high intensity UV light for long periods may cause permanent damage.

4.5 Programming procedure. The programming procedures shall be as specified by the device manufacturer and shall be made available upon request.

TABLE II. Electrical test requirements. \*

| MIL-STD-883 test requirements                                | Subgroups (per method 5005, table I)       |
|--------------------------------------------------------------|--------------------------------------------|
| Interim electrical parameters (method 5004)                  | - - -                                      |
| Final electrical test parameters (method 5004)               | 1*, 2, 3, 7*, 8A, 8B, 9, 10, 11            |
| Group A test requirements (method 5005)                      | 1, 2, 3, 4**, 7***, (8A, 8B)***, 9, 10, 11 |
| Groups C and D end-point electrical parameters (method 5005) | 2, 3, 7, 8A, 8B                            |

\* Indicates PDA applies to subgroup 1 and 7.

\*\* See 4.3.1e.

\*\*\* See 4.3.1d.

## 5. PACKAGING

5.1 Packaging requirements. The requirements for packaging shall be in accordance with MIL-PRF-38535, appendix A.

## 6. NOTES

6.1 Intended use. Microcircuits conforming to this drawing are intended for use for Government microcircuit applications (original equipment), design applications, and logistics purposes.

6.2 Replaceability. Microcircuits covered by this drawing will replace the same generic device covered by a contractor-prepared specification or drawing.

|                                                                                                                     |                  |                     |                   |
|---------------------------------------------------------------------------------------------------------------------|------------------|---------------------|-------------------|
| <b>STANDARD<br/>MICROCIRCUIT DRAWING</b><br><br><b>DEFENSE SUPPLY CENTER COLUMBUS<br/>COLUMBUS, OHIO 43218-3990</b> | SIZE<br><b>A</b> |                     | <b>5962-87515</b> |
|                                                                                                                     |                  | REVISION LEVEL<br>B | SHEET<br>11       |

6.3 Configuration control of SMD's. All proposed changes to existing SMD's will be coordinated with the users of record for the individual documents. This coordination will be accomplished using DD Form 1692, Engineering Change Proposal.

6.4 Record of users. Military and industrial users shall inform Defense Supply Center Columbus (DSCC) when a system application requires configuration control and the applicable SMD. DSCC will maintain a record of users and this list will be used for coordination and distribution of changes to the drawings. Users of drawings covering microelectronics devices (FSC 5962) should contact DSCC-VA, telephone (614) 692-0544.

6.5 Comments. Comments on this drawing should be directed to DSCC-VA, Columbus, Ohio 43218-3990, or telephone (614) 692-0547.

6.6 Approved sources of supply. Approved sources of supply are listed in MIL-HDBK-103. The vendors listed in MIL-HDBK-103 have agreed to this drawing and a certificate of compliance (see 3.6 herein) has been submitted to and accepted by DSCC-VA.

|                                                                                                                     |                   |                             |                     |
|---------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------|---------------------|
| <b>STANDARD<br/>MICROCIRCUIT DRAWING</b><br><br><b>DEFENSE SUPPLY CENTER COLUMBUS<br/>COLUMBUS, OHIO 43218-3990</b> | <b>SIZE<br/>A</b> |                             | <b>5962-87515</b>   |
|                                                                                                                     |                   | <b>REVISION LEVEL<br/>B</b> | <b>SHEET<br/>12</b> |

## STANDARD MICROCIRCUIT DRAWING BULLETIN

DATE: 06-06-06

Approved sources of supply for SMD 5962-87515 are listed below for immediate acquisition information only and shall be added to MIL-HDBK-103 and QML-38535 during the next revision. MIL-HDBK-103 and QML-38535 will be revised to include the addition or deletion of sources. The vendors listed below have agreed to this drawing and a certificate of compliance has been submitted to and accepted by DSCC-VA. This information bulletin is superseded by the next dated revision of MIL-HDBK-103 and QML-38535. DSCC maintains an online database of all current sources of supply at <http://www.dscclia.mil/Programs/Smcr/>.

| Standard microcircuit <u>1/</u><br>drawing PIN | Vendor<br>CAGE<br>number    | Vendor<br>similar PIN <u>2/</u>                        |
|------------------------------------------------|-----------------------------|--------------------------------------------------------|
| 5962-8751501JA                                 | 0C7V7<br>0C7V7<br><u>3/</u> | WS57C49C-45DMB<br>QP7C264-45WMB<br>AT27HC641R-45DM/883 |
| 5962-8751501LA                                 | 0C7V7<br>0C7V7<br><u>3/</u> | WS57C49C-45TMB<br>QP7C263-45WMB<br>AT27HC642R-45DM/883 |
| 5962-87515013A                                 | 0C7V7<br>0C7V7<br><u>3/</u> | WS57C49C-45CMB<br>QP7C263-45QMB<br>AT27HC641R-45LM/883 |
| 5962-87515013C                                 | 0C7V7<br>0C7V7              | WS57C49C-45CMB<br>QP7C263-45QMB                        |
| 5962-8751501KA                                 | 0C7V7<br>0C7V7<br><u>3/</u> | WS57C49C-45FMB<br>QP7C263-45TMB<br>AT27HC641R-45FM/883 |
| 5962-8751502JA                                 | 0C7V7<br>0C7V7<br><u>3/</u> | WS57C49C-55DMB<br>QP7C264-55WMB<br>AT27HC641R-55DM/883 |
| 5962-8751502LA                                 | 0C7V7<br>0C7V7<br><u>3/</u> | WS57C49C-55TMB<br>QP7C263-55WMB<br>AT27HC642R-55DM/883 |
| 5962-87515023A                                 | 0C7V7<br>0C7V7<br><u>3/</u> | WS57C49C-55CMB<br>QP7C263-55QMB<br>AT27HC642R-55LM/883 |
| 5962-87515023C                                 | 0C7V7<br>0C7V7              | WS57C49C-55CMB<br>QP7C263-55QMB                        |
| 5962-8751502KA                                 | 0C7V7<br>0C7V7<br><u>3/</u> | WS57C49C-55FMB<br>QP7C263-55TMB<br>AT27HC642R-55FM/883 |
| 5962-8751503JA                                 | 0C7V7<br>0C7V7<br><u>3/</u> | WS57C49C-70DMB<br>QP7C264-70WMB<br>AT27HC641R-70DM/883 |
| 5962-8751503LA                                 | 0C7V7<br>0C7V7<br><u>3/</u> | WS57C49C-70TMB<br>QP7C263-70WMB<br>AT27HC642R-70DM/883 |
| 5962-87515033A                                 | 0C7V7<br>0C7V7<br><u>3/</u> | WS57C49C-70CMB<br>QP7C263-70QMB<br>AT27HC641R-70LM/883 |
| 5962-87515033C                                 | 0C7V7<br>0C7V7              | WS57C49C-70CMB<br>QP7C263-70QMB                        |
| 5962-8751503KA                                 | 0C7V7<br>0C7V7<br><u>3/</u> | WS57C49C-70FMB<br>QP7C263-70TMB<br>AT27HC641R-70FM/883 |

See notes at end of table.

## STANDARD MICROCIRCUIT DRAWING BULLETIN – Continued.

| Standard microcircuit <u>1</u> /<br>drawing PIN | Vendor<br>CAGE<br>number     | Vendor<br>similar PIN <u>2</u> /                       |
|-------------------------------------------------|------------------------------|--------------------------------------------------------|
| 5962-8751504JA                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-90DMB<br>QP7C264-90WMB<br>AT27HC641R-90DM/883 |
| 5962-8751504LA                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-90TMB<br>QP7C263-90WMB<br>AT27HC642R-90DM/883 |
| 5962-87515043A                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-90CMB<br>QP7C263-90QMB<br>AT27HC641R-90LM/883 |
| 5962-87515043C                                  | 0C7V7<br>0C7V7               | WS57C49C-90CMB<br>QP7C263-90QMB                        |
| 5962-8751504KA                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-90FMB<br>QP7C263-90TMB<br>AT27HC641R-90FM/883 |
| 5962-8751505JA                                  | 0C7V7                        | WS57C49C-45DMB                                         |
| 5962-8751505LA                                  | 0C7V7<br>0C7V7<br>65786      | WS57C49C-45TMB<br>QP7C261-45WMB<br>CY7C261-45WMB       |
| 5962-87515053A                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-45CMB<br>QP7C261-45QMB<br>CY7C261-45QMB       |
| 5962-87515053C                                  | 0C7V7                        | WS57C49C-45CMB                                         |
| 5962-8751505KA                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-45FMB<br>QP7C261-45TMB<br>CY7C261-45TMB       |
| 5962-8751506JA                                  | 0C7V7                        | WS57C49C-55DMB                                         |
| 5962-8751506LA                                  | 0C7V7<br>0C7V7<br>65786      | WS57C49C-55TMB<br>QP7C261-55WMB<br>CY7C261-55WMB       |
| 5962-87515063A                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-55CMB<br>QP7C261-55QMB<br>CY7C261-55QMB       |
| 5962-87515063C                                  | 0C7V7                        | WS57C49C-55CMB                                         |
| 5962-8751506KA                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-55FMB<br>QP7C261-55TMB<br>CY7C261-55TMB       |
| 5962-8751507JA                                  | 0C7V7                        | WS57C49C-35DMB                                         |
| 5962-8751507LA                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-35TMB<br>QP7C261-35WMB<br>CY7C261-35WMB       |
| 5962-87515073A                                  | 0C7V7<br>0C7V7<br>65786      | WS57C49C-35CMB<br>QP7C261-35QMB<br>CY7C261-35QMB       |

See notes at end of table.

## STANDARD MICROCIRCUIT DRAWING BULLETIN – Continued.

| Standard microcircuit <u>1</u> /<br>drawing PIN | Vendor<br>CAGE<br>number     | Vendor<br>similar PIN <u>2</u> /                 |
|-------------------------------------------------|------------------------------|--------------------------------------------------|
| 5962-87515073C                                  | 0C7V7                        | WS57C49C-35CMB                                   |
| 5962-8751507KA                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-35FMB<br>QP7C261-35TMB<br>CY7C261-35TMB |
| 5962-87515083A                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-35CMB<br>QP7C263-35QMB<br>CY7C263-35QMB |
| 5962-87515083C                                  | 0C7V7                        | WS57C49C-35CMB                                   |
| 5962-8751508JA                                  | 0C7V7<br>0C7V<br><u>3</u> /  | WS57C49C-35DMB<br>QP7C264-35WMB<br>CY7C264-35WMB |
| 5962-8751508KA                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-35FMB<br>QP7C263-35TMB<br>CY7C263-35TMB |
| 5962-8751508LA                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-35TMB<br>QP7C263-35WMB<br>CY7C263-35WMB |
| 5962-87515093A                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-45CMB<br>QP7C263-45QMB<br>CY7C263-45QMB |
| 5962-87515093C                                  | 0C7V7                        | WS57C49C-45CMB                                   |
| 5962-8751509JA                                  | 0C7V7<br>0C7V<br><u>3</u> /  | WS57C49C-45DMB<br>QP7C264-45WMB<br>CY7C264-45WMB |
| 5962-8751509KA                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-45FMB<br>QP7C263-45TMB<br>CY7C263-45TMB |
| 5962-8751509LA                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-45TMB<br>QP7C263-45WMB<br>CY7C263-45WMB |
| 5962-87515103A                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-55CMB<br>QP7C263-55QMB<br>CY7C263-55QMB |
| 5962-87515103C                                  | 0C7V7                        | WS57C49C-55CMB                                   |
| 5962-8751510JA                                  | 0C7V7<br>0C7V<br><u>3</u> /  | WS57C49C-55DMB<br>QP7C264-55WMB<br>CY7C264-55WMB |
| 5962-8751510KA                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-55FMB<br>QP7C263-55TMB<br>CY7C263-55TMB |
| 5962-8751510LA                                  | 0C7V7<br>0C7V7<br><u>3</u> / | WS57C49C-55TMB<br>QP7C263-55WMB<br>CY7C263-55WMB |

See notes at end of table.

STANDARD MICROCIRCUIT DRAWING BULLETIN – Continued.

| Standard microcircuit <u>1/</u><br>drawing PIN | Vendor<br>CAGE<br>number | Vendor<br>similar PIN <u>2/</u> |
|------------------------------------------------|--------------------------|---------------------------------|
| 5962-87515113A                                 | 0C7V7<br><u>3/</u>       | QP7C263-25QMB<br>CY7C263-25QMB  |
| 5962-8751511JA                                 | 0C7V7<br><u>3/</u>       | QP7C264-25WMB<br>CY7C264-25WMB  |
| 5962-8751511KA                                 | 0C7V7<br><u>3/</u>       | QP7C263-25TMB<br>CY7C263-25TMB  |
| 5962-8751511LA                                 | 0C7V7<br><u>3/</u>       | QP7C263-25WMB<br>CY7C263-25WMB  |
| 5962-87515123A                                 | 0C7V7<br><u>3/</u>       | QP7C261-25QMB<br>CY7C261-25QMB  |
| 5962-8751512KA                                 | 0C7V7<br><u>3/</u>       | QP7C261-25TMB<br>CY7C261-25TMB  |
| 5962-8751512LA                                 | 0C7V7<br><u>3/</u>       | QP7C261-25WMB<br>CY7C261-25WMB  |

1/ The lead finish shown for each PIN representing a hermetic package is the most readily available from the manufacturer listed for that part. If the desired lead finish is not listed contact the Vendor to determine its availability.

2/ Caution. Do not use this number for item acquisition. Items acquired to this number may not satisfy the performance requirements of this drawing.

3/ No longer available from an approved source.

Vendor CAGE  
number

65786

Vendor name  
and address

Cypress Semiconductor  
3901 N. First Street  
San Jose, CA 95134-1506

0C7V7

QP Semiconductor  
2945 Oakmead Village Court  
Santa Clara, CA 95051

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