

## EDO MODE DRAM MODULE

**16M Bytes (2M x 64 bits)**  
**EDO Mode Unbuffered SODIMM**

based on 8 pcs 2M x 8 DRAM with LVTTL, 2K & 4K Refresh

### GENERAL DESCRIPTION

The UG42W642(4)8GSG is a 2Mbits x 64 EDO DRAM module. The UG42W642(4)8GSG is assembled using 8 pcs of 2M x 8 2K/4K refresh DRAMs mounted on 144 pin unbuffered printed circuit board.

### FEATURES

- Single 3.3V ± 10% power supply
- Hyper Page Mode (EDO) operation
- 11\11\12\9 Addressing (Row\Column)
- 2048/4096 refresh cycles every 32/64 ms
- CAS-before-RAS Refresh capability
- LVTTL compatible inputs and output
- Serial PD with EEPROM
- PCB:Height (1,400mil),single sided component

### ABSOLUTE MAXIMUM RATINGS

- Voltage Relative to GND -0.5 to + 4.6V
- Operating Temperature 0 to + 70°C
- Storage Temperature -55°C to + 125°C
- Short circuit Output Current 50mA
- Power Dissipation 8W

### PART IDENTIFICATION

| PART NO.     | REF. CYCLE | PLATING |
|--------------|------------|---------|
| UG42W6428GSG | 2K         | Gold    |
| UG42W6448GSG | 4K         | Gold    |

### REVISION HISTORY

Jun 18 , 2002

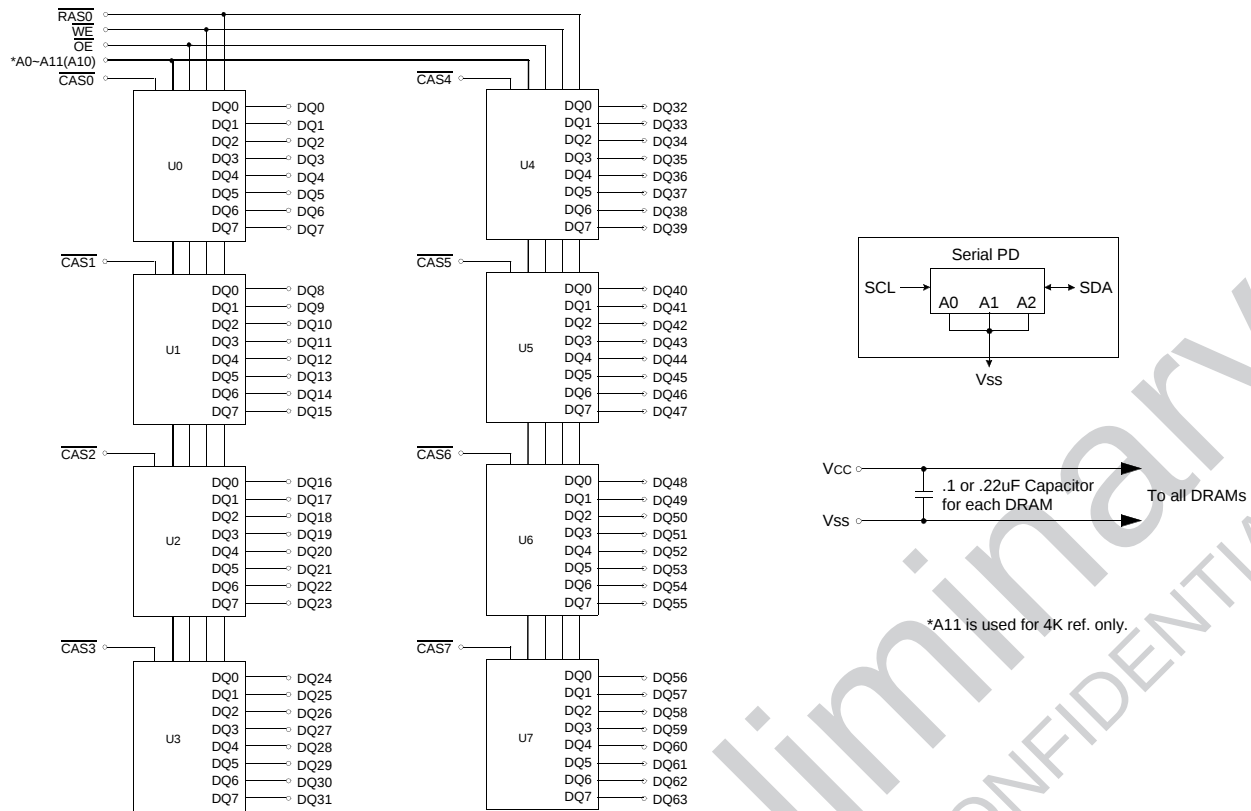
Rev - A Product brief released.

### PIN ASSIGNMENT (Front View) 144-Pin SODIMM

| PIN | SYMBOL | PIN | SYMBOL | PIN | SYMBOL | PIN | SYMBOL |
|-----|--------|-----|--------|-----|--------|-----|--------|
| 1   | VSS    | 2   | VSS    | 73  | /OE    | 74  | NC     |
| 3   | DQ0    | 4   | DQ32   | 75  | VSS    | 76  | VSS    |
| 5   | DQ1    | 6   | DQ33   | 77  | NC     | 78  | NC     |
| 7   | DQ2    | 8   | DQ34   | 79  | NC     | 80  | NC     |
| 9   | DQ3    | 10  | DQ35   | 81  | Vcc    | 82  | Vcc    |
| 11  | Vcc    | 12  | Vcc    | 83  | DQ16   | 84  | DQ48   |
| 13  | DQ4    | 14  | DQ36   | 85  | DQ17   | 86  | DQ49   |
| 15  | DQ5    | 16  | DQ37   | 87  | DQ18   | 88  | DQ50   |
| 17  | DQ6    | 18  | DQ38   | 89  | DQ19   | 90  | DQ51   |
| 19  | DQ7    | 20  | DQ39   | 91  | VSS    | 92  | VSS    |
| 21  | VSS    | 22  | VSS    | 93  | DQ20   | 94  | DQ52   |
| 23  | /CAS0  | 24  | /CAS4  | 95  | DQ21   | 96  | DQ53   |
| 25  | /CAS1  | 26  | /CAS5  | 97  | DQ22   | 98  | DQ54   |
| 27  | Vcc    | 28  | Vcc    | 99  | DQ23   | 100 | DQ55   |
| 29  | A0     | 30  | A3     | 101 | Vcc    | 102 | Vcc    |
| 31  | A1     | 32  | A4     | 103 | A6     | 104 | A7     |
| 33  | A2     | 34  | A5     | 105 | A8     | 106 | NC     |
| 35  | VSS    | 36  | VSS    | 107 | VSS    | 108 | VSS    |
| 37  | DQ8    | 38  | DQ40   | 109 | A9     | 110 | NC/A12 |
| 39  | DQ9    | 40  | DQ41   | 111 | A10    | 112 | A11    |
| 41  | DQ10   | 42  | DQ42   | 113 | Vcc    | 114 | Vcc    |
| 43  | DQ11   | 44  | DQ43   | 115 | /CAS2  | 116 | /CAS6  |
| 45  | Vcc    | 46  | Vcc    | 117 | /CAS3  | 118 | /CAS7  |
| 47  | DQ12   | 48  | DQ44   | 119 | VSS    | 120 | VSS    |
| 49  | DQ13   | 50  | DQ45   | 121 | DQ24   | 122 | DQ56   |
| 51  | DQ14   | 52  | DQ46   | 123 | DQ25   | 124 | DQ57   |
| 53  | DQ15   | 54  | DQ47   | 125 | DQ26   | 126 | DQ58   |
| 55  | VSS    | 56  | VSS    | 127 | DQ27   | 128 | DQ59   |
| 57  | NC     | 58  | NC     | 129 | Vcc    | 130 | Vcc    |
| 59  | NC     | 60  | NC     | 131 | DQ28   | 132 | DQ60   |
| 61  | NC     | 62  | NC     | 133 | DQ29   | 134 | DQ61   |
| 63  | Vcc    | 64  | Vcc    | 135 | DQ30   | 136 | DQ62   |
| 65  | NC     | 66  | NC     | 137 | DQ31   | 138 | DQ63   |
| 67  | /WE    | 68  | NC     | 139 | VSS    | 140 | VSS    |
| 69  | /RAS0  | 70  | NC     | 141 | SDA    | 142 | SCL    |
| 71  | NC     | 72  | NC     | 143 | Vcc    | 144 | Vcc    |

NOTE: Pin symbols in parentheses are not used on these modules but may be used for other modules in this product family. They are for reference only.

## Functional Block Diagram



## Physical Dimension

