

# MOS Memories

## Dynamic RAMs for Video

| Memory Size (bit) | Type No.    | Memory Composition (Word × bit) | Access Time max. (ns)       | Cycle Time min. (ns) | Supply Voltage (V) | Power Consumption max. (mW) |          | Package No.     | Process | Remarks |   |
|-------------------|-------------|---------------------------------|-----------------------------|----------------------|--------------------|-----------------------------|----------|-----------------|---------|---------|---|
|                   |             |                                 |                             |                      |                    | Operating                   | Stand-by |                 |         |         |   |
| 10K               | MN4760S     | 1135 × 9                        | 50                          | 50                   | 4.5 ~ 5.5          | 440                         | —        | SOP028-P-0425   | M25     | NMOS    | ● Line memory                                 |
| 22K               | MN4780AK    | 920 × 2 × 12                    | —                           | 33                   | 4.5 ~ 5.5          | 495                         | —        | SDIP040-P-0600A | M15     | NMOS    | ● Line memory                                 |
| 256K              | MN47464L-12 | 65,536 × 4                      | RAM port 120<br>SAM port 40 | 220<br>40            | 4.5 ~ 5.5          | 523<br>275                  | 110      | ZIP024-P-0400   | M5      | NMOS    | ● Multi port memory                           |
| 0.9M              | MN4791S     | 768 × 290 × 4                   | 60                          | 70                   | 4.5 ~ 5.5          | 192.5                       | —        | SOP028-P-0425   | M25     | CMOS    | ● FIFO memory/<br>Random line access          |
|                   | MN4792S     | 768 × 290 × 4                   | 65                          | 70                   | 3.3 ~ 3.9          | 136.5                       | —        | SOP028-P-0425   | M25     | CMOS    | ● FIFO memory/<br>Random line access          |
|                   | MN4713F     | 432 × 265 × 8                   | 60                          | 120                  | 4.5 ~ 5.5          | 440                         | 82.5     | QFP064-P-1818   | M31     | CMOS    | ● Field memory with DVE                       |
|                   | ▲MN4713HF   | 432 × 265 × 8                   | 30                          | 60                   | 4.5 ~ 5.5          | 440                         | 82.5     | QFP064-P-1818   | M31     | CMOS    | ● Field memory with DVE                       |
| 1M                | MN4700      | 32,768 × 8 × 4                  | 20                          | 30                   | 4.5 ~ 5.5          | 825                         | 110      | DIP040-P-0600   | M22     | NMOS    | ● Field memory                                |
|                   | MN4700K     |                                 |                             |                      |                    |                             |          | SDIP040-P-0600A | M24     |         |   |
|                   | MN4700F     |                                 |                             |                      |                    |                             |          | QFP064-P-1818   | M31     |         |   |
|                   | MN4700S     | 32,768 × 8 × 4                  | 40                          | 60                   | 4.0 ~ 5.0          | 500                         | 75       | SSOP042-P-0450  | M29     | NMOS    | ● Field memory<br>(Low voltage specification) |
|                   | MN4771S-03  | 262,224 × 4                     | 25                          | 30                   | 4.5 ~ 5.5          | 275                         | 27.5     | SOP028-P-0425   | M25     | CMOS    | ● FIFO memory                                 |
|                   | MN4771S-04  |                                 | 30                          | 40                   |                    | 220                         | 27.5     |                 |         |         |   |
|                   | MN4772S-03  |                                 | 25                          | 30                   |                    | 275                         | 27.5     |                 |         |         |   |
| MN4772S-04        | 30          |                                 | 40                          | 220                  |                    | 27.5                        |          |                 |         |         |   |
| 1.3M              | MN4701S     | 40,960 × 8 × 4                  | 20                          | 30                   | 4.0 ~ 5.0          | 550                         | 85       | SSOP042-P-0450  | M29     | NMOS    | ● Field memory<br>(Low voltage specification) |
| 1.8M              | MN4711F     | 864 × 265 × 8                   | 30                          | 60                   | 4.5 ~ 5.5          | 825                         | 82.5     | QFP064-P-1818   | M31     | CMOS    | ● Field memory with DVE                       |
|                   | ▲MN4711HF   | 864 × 265 × 8                   | 25                          | 30                   | 4.5 ~ 5.5          | 825                         | 82.5     | QFP064-P-1818   | M31     | CMOS    | ● Field memory with DVE                       |
| 2M                | MN4773S-03  | 262,224 × 8                     | 25                          | 30                   | 4.5 ~ 5.5          | 495                         | 38.5     | SOP028-P-0425   | M25     | CMOS    | ● FIFO memory                                 |
|                   | MN4773S-04  |                                 | 30                          | 40                   |                    | 385                         | 38.5     |                 |         |         |   |
|                   | MN4774S-03  |                                 | 25                          | 30                   |                    | 495                         | 38.5     |                 |         |         |   |
|                   | MN4774S-04  |                                 | 30                          | 40                   |                    | 385                         | 38.5     |                 |         |         |   |
|                   | ▲MN4703FS   | 32,768 × 8 × 8                  | 25                          | 30                   | 4.5 ~ 5.5          | 550                         | 16.5     | SSOP050-P-0850  | M30     | CMOS    | ● Field memory                                |
| 4.3M              | MN47C401FS  | 960 × 568 × 8                   | 20                          | 27                   | 4.5 ~ 5.5          | 550                         | —        | SSOP050-P-0850  | M30     | CMOS    | ● For HiTV (MUSE decoder)                     |

▲ Under development