

# VII. Motor Drive,Control Section

## Motor Drive IC Product Function Comparison Chart

| Application                    | Function                                     | Type of IC used       | Type No.                                                           |
|--------------------------------|----------------------------------------------|-----------------------|--------------------------------------------------------------------|
| FDD<br>(Floppy disk drive)     | Controller                                   | Controller            | TC68001 2F(4-bit CPU)                                              |
|                                | Spindle                                      | Dedicated single chip | TA8453F TA8434F                                                    |
|                                |                                              | Servo                 | TC9142 TC9203P/F(PLL) TA7715P(F servo) TC9193F                     |
|                                |                                              | Hall motor            | TA7736P/F(3.5) TA7259P/F(5.25)                                     |
|                                | Head                                         | Stepping motor        | TA7774P/F TA7534P TD62M4700F TA8430AF                              |
|                                |                                              | Voice coil motor      | TA7256P TA7272P TA8406P/F TA8470P/F                                |
| HDD<br>(Hard disk drive)       | Controller                                   | Controller            | TC8561F T7508                                                      |
|                                | Spindle                                      | Dedicated single chip | TA8453F                                                            |
|                                |                                              | Servo                 | TC9193F TC9142P TC9203P/F                                          |
|                                |                                              | Hall motor            | TA7736P/F (3.5) TA7259P/F(5.25)                                    |
|                                | Head                                         | Stepping motor        | TA7774P/F TA7289P/F TD62M4700F TA8430AF                            |
|                                |                                              | Voice coil motor      | TA7272P TA8407P/F                                                  |
| Printer                        | Carriage                                     | Stepping motor        | TD62803P TA7289P/F TA8415P TD62308AP/B-1/F/AF TD62064AP/BP-1/F/AF  |
|                                | Feed (paper, ribbon)                         | Stepping motor        | TA7289P/F TD62803P TA8415P TD62308AP/BP-1/F/AF TD62064AP/BP-1/F/AF |
|                                | Daisy wheel drive                            | Stepping motor        | TA7289P/F TA777P/F                                                 |
|                                | Polygon mirror drive<br>(for laser printers) | Servo                 | TC9142P TC9203P/F                                                  |
|                                |                                              | Hall motor            | TA7248P TA7259P TA8453F                                            |
|                                |                                              |                       |                                                                    |
| Optical disk                   | Spindle                                      | Servo                 | TC9142P TC9203F                                                    |
|                                |                                              | Hall motor            | TA7247AP TA7248P                                                   |
| Facsimile                      | Feed                                         | System driver         | TA8411L/H                                                          |
|                                |                                              | Stepping motor        | TA7289P/F TD62064AP/F/AF TD62064BP-1 TD62107BP/F                   |
|                                | Cutter                                       | Bridge driver         | TA7279P TA7267BP TA8419P                                           |
| ETW<br>(Electronic typewriter) | Carriage                                     | Stepping motor        | TA7289P/F TD62803P TA8425H TA8435H                                 |
|                                | Ribbon feed                                  | Stepping motor        | TA7289P/F TA7774P/F TD62308AP/BP-1/F/AF TD62064AP/BP-1/F/AF        |
|                                | Paper feed                                   | Stepping motor        | TA7289P/F TA7774P/F TD62803P TA8425H TD62308AP/BP-1/F/AF           |
|                                |                                              | Bridge driver         | TA7279P TA7267BP TA8419P TA8428K TA8429H                           |
|                                | Daisy wheel                                  | Stepping motor        | TA7289P/F                                                          |
| LBP<br>(Laser beam printer)    | Drum                                         | Stepping motor        | TD62803P TA8415P TA62308AP/BP-1/F/AF TD62064AP/BP-1/F/AF           |
|                                | Lens, mirror                                 | Stepping motor        | TA7289P/F TA8425H TD62308AP/BP-1/F/AF TD62064AP/BP-1/F/AF          |
|                                |                                              | Hall motor            | TA7712P TA8412P TA8443F TA8444F                                    |
|                                | Scanner                                      | Stepping motor        | TD62803P TA7289P/F TA8415P TD62308AP/BP-1/F/AF                     |
|                                | Toner hopper, sorter                         | Bridge driver         | TA7267BP TA8419P TA8428K TA8429H                                   |
|                                | Heat roller                                  | Hall motor            | TA7712P TA8412P TA8443F TA8444F                                    |
|                                | Fan                                          | Hall motor            | TA7247AP TA7284P TA8414P/F TA8420AF TA8421AF                       |
|                                | Paper feed                                   | Hall motor            | TA7712P/F TA8412P TA8443F TA8444F                                  |
|                                |                                              | Stepping motor        | TD62803P TA7289P/F TA8415P TD62308AP/BP-1/F/AF                     |
|                                | Polygon mirror                               | Hall motor            | TA8453F TC9142P/F TA7259P/F                                        |

## Hall Sensor Product Chart

| Application                              | Type No. | Package                           | V <sub>H</sub> (mV) |
|------------------------------------------|----------|-----------------------------------|---------------------|
| DC brushless motor<br>Position detection | THS112   | SSIP                              | 65~170              |
|                                          | THS119   |                                   | 55~140              |
|                                          | THS106A  | SMQ (Surface-mounting type)       | 65~170              |
|                                          | THS117   |                                   | 55~140              |
|                                          | THS108A  | USH (Surface-mounting, thin type) | 65~170              |
|                                          | THS118   |                                   | 55~140              |

## 2. Printer Head Driver IC Product Chart

| Application | Type No.          | bit | Features                       | Maximum ratings    |                     |       | Package     |
|-------------|-------------------|-----|--------------------------------|--------------------|---------------------|-------|-------------|
|             |                   |     |                                | V <sub>o</sub> (V) | I <sub>o</sub> (mA) |       |             |
|             |                   |     |                                |                    | AVERAGE             | PEAK  |             |
| Thermal     | TD62C805F         | 48  | SRLD                           | 30                 | 100                 | —     | μPFP80      |
|             | TD62C806F         | 32  | SRLD                           | 30                 | 100                 | —     | μPFP64      |
|             | TD62801P/F        | 8   | SRLD                           | 26                 | 60                  | —     | DIP16/PFP16 |
|             | TD62824P          | 24  | 3bit SR×8                      | 28                 | 80                  | 150   | DIP42       |
|             | TD6235BP          | 8   | SRLD                           | 30                 | 40                  | —     | DIP16       |
|             | TD62381P          | 8   | Transistor array (H: ACT)      | 15                 | 500                 | —     | DIP18       |
|             | TD62382AP/F/AF    | 8   | Transistor array (L: ACT)      | 50/35              | 50                  | —     | DIP18/FLP18 |
|             | TD62384, 5AP/F/AF | 8   | Transistor array (L: ACT)      | 50/35              | 500                 | —     | DIP18/FLP18 |
|             | TD62583AP/F/AF    | 8   | Transistor array (L: ACT)      | 50/35              | 50                  | —     | DIP18/FLP18 |
|             | TD62781, 2AP/F/AF | 8   | Transistor array (L: ACT)      | 50/35              | —50                 | —     | DIP18/FLP18 |
| Ink jet     | TD62083CP         | 8   | Transistor array (H: ACT)      | 100                | 400                 | —     | DIP18       |
|             | TD62940P          | 4   | Head Driver                    | 150                | —                   | ±1500 | L-DIP24     |
|             | TD62981P          | 8   | 8 bit, 3-state Buffer          | 120                | +20, −10            | —     | DIP20       |
|             | TD62C931F         | 40  | SRLD                           | 90                 | 350                 | —     | μPFP64      |
|             | TD62C946F         | 34  | SRLD                           | 250                | ±60                 | —     | μPFP64      |
| Wire dot    | TD62064AP/BP-1/AF | 4   | Transistor array (H: ACT)      | 50/80/50           | 1500                | —     | DIP16/PFP16 |
|             | TD62107P/BP/F     | 4   | Transistor array (H: ACT)      | 45/80              | 750                 | —     | DIP16/PFP16 |
|             | TD62308AP/BP-1/AF | 4   | Transistor array (L: ACT)      | 50/80/50           | —1500               | —     | DIP16/PFP16 |
|             | TD62164AP/AF      | 4   | Transistor array (H: ACT)      | 50                 | 700                 | —     | DIP16/PFP16 |
|             | TD62318AP/AF      | 4   | Transistor array (L: ACT)      | 50                 | —700                | —     | DIP16/PFP16 |
| LED         | TD62C938F         | 34  | SRLD                           | 120                | 350                 | —     | μPFP64      |
|             | TD62C850N         | 16  | SRLD (constant current output) | 16                 | 30                  | —     | DIP30N      |
|             | TD62781、2AP/F     | 8   | Transistor array (H: ACT)      | 60                 | 50                  | —     | DIP18/FLP18 |
|             | TD62783、4AP/F     | 8   | Transistor array (H: ACT)      | 50                 | —500                | —     | DIP18/FLP18 |
|             | TD62786、7AP/F     | 8   | Transistor array (L: ACT)      | 50                 | —500                | —     | DIP18/FLP18 |

SRLD: Shift Register + Latch + Driver