

# IC INFORMATION

| Function |  | TC9495F2 |                 | 1/2 | E |
|----------|--|----------|-----------------|-----|---|
| Type     |  | Model    | DEH-P630/X1N/UC |     |   |

## ● Pin Functions(TC9495F2)

| Pin No. | Pin Name                  | I/O | Function and Operation                                    |
|---------|---------------------------|-----|-----------------------------------------------------------|
| 1       | TESTO                     | -   | Test mode terminal                                        |
| 2       | H $\overline{\text{SO}}$  | O   | Replay speed flag output terminal                         |
| 3       | U $\overline{\text{HSO}}$ | O   | Replay speed flag output terminal                         |
| 4       | EMPH                      | O   | Emphasis flag output terminal for sub code Q data         |
| 5       | LRCK                      | O   | Channel clock (44.1 kHz) output terminal                  |
| 6       | VSS                       | -   | Digital ground terminal                                   |
| 7       | BCK                       | O   | Bit clock output terminal                                 |
| 8       | AOUT                      | O   | Digital audio data output terminal                        |
| 9       | DOUT                      | O   | Digital out output terminal                               |
| 10      | MBOV                      | O   | Buffer memory over signal output terminal                 |
| 11      | IPF                       | O   | Correction flag output terminal                           |
| 12      | SBOK                      | O   | CRCC decision result output for sub code Q data           |
| 13      | CLCK                      | I/O | Clock input/output terminal for sub code P-W data read    |
| 14      | VDD                       | -   | Digital + power supply terminal (5 V)                     |
| 15      | VSS                       | -   | Digital ground terminal                                   |
| 16      | DATA                      | O   | Sub code P-W data output terminal                         |
| 17      | SFSY                      | O   | Replay-system frame sync signal output terminal           |
| 18      | SBSY                      | O   | Sub code block sync output terminal                       |
| 19      | SPCK                      | O   | Clock for processor status signal read                    |
| 20      | SPDA                      | O   | Processor status signal output terminal                   |
| 21      | COFS                      | O   | Correction-system frame clock (7.35 kHz) output terminal  |
| 22      | MONIT                     | O   | LSI internal signal output terminal                       |
| 23      | VDD                       | -   | Digital + power supply terminal (5 V)                     |
| 24      | TESIOO                    | I   | Test input/output terminal                                |
| 25      | P2VREF                    | -   | PLL-system only 2VREF terminal                            |
| 26      | HSSW                      | O   | The VREF voltage is reached for double or quad speed.     |
| 27      | ZDET                      | O   | One-bit DAC zero detection flag output terminal           |
| 28      | PDO                       | O   | Phase error signal issue between the EFM and PLCK signals |
| 29      | TMAXS                     | O   | TMAX detection result output terminal                     |
| 30      | TAMX                      | O   | TMAX detection result output terminal                     |
| 31      | LPFN                      | I   | Reverse input terminal of amplifier for lowpass filter    |
| 32      | LPFO                      | O   | Output terminal of amplifier for lowpass filter           |
| 33      | PVREF                     | -   | PLL-system only VREF terminal                             |
| 34      | VCOREF                    | I   | VCO center frequency reference level terminal             |
| 35      | VCOF                      | O   | Filter terminal for VCO                                   |
| 36      | AVSS                      | -   | Analog-system ground terminal                             |
| 37      | SLCO                      | O   | Output terminal of DAC for data slice level generation    |
| 38      | RFI                       | I   | RF signal input terminal                                  |
| 39      | AVDD                      | -   | Analog-system power supply terminal (5 V)                 |
| 40      | RFCT                      | I   | RFRP signal center level input terminal                   |
| 41      | RFZI                      | I   | Input terminal for RFRP signal zero cross                 |
| 42      | RFRP                      | I   | RF ripple signal input terminal                           |
| 43      | FEI                       | I   | Focus error signal input terminal                         |
| 44      | SBAD                      | I   | Sub beam addition signal input terminal                   |
| 45      | TSIN                      | I   | Test input terminal                                       |
| 46      | TEI                       | I   | Tracking error input terminal                             |
| 47      | TEZI                      | I   | Input terminal for tracking error or zero cross           |
| 48      | FOO                       | O   | Focus equalizer output terminal                           |
| 49      | TRO                       | O   | Tracking equalizer output terminal                        |
| 50      | VREF                      | -   | Analog reference power supply terminal                    |
| 51      | RFGC                      | O   | RF amplitude adjustment control signal output terminal    |
| 52      | TEBC                      | O   | Tracking balance control signal output terminal           |
| 53      | FMO                       | O   | Feed equalizer output terminal                            |
| 54      | FVO                       | O   | Speed error signal or feed search EQ output               |
| 55      | DMO                       | O   | Disc equalizer output terminal                            |
| 56      | 2VREF                     | -   | Analog reference power supply terminal                    |
| 57      | SEL                       | O   | APC circuit ON/OFF signal output terminal                 |

# IC INFORMATION

|          |                           |                 |                 |       |
|----------|---------------------------|-----------------|-----------------|-------|
|          |                           | <b>TC9495F2</b> |                 |       |
| Function | Servo Control/DSP/DAC/LPF |                 |                 | 2/2 E |
| Type     | CMOS                      | Model           | DEH-P630/X1N/UC |       |

| Pin No. | Pin Name | I/O | Function and Operation                                                                                    |
|---------|----------|-----|-----------------------------------------------------------------------------------------------------------|
| 58-61   | FLGA-D   | O   | External flag output terminal for internal signal monitor                                                 |
| 62      | VDD      | -   | Digital + power supply terminal (5 V)                                                                     |
| 63      | VSS      | -   | Digital ground terminal                                                                                   |
| 64      | IO0      | O   | RF amplifier gain switching terminal                                                                      |
| 65      | IO1      | O   | Not used                                                                                                  |
| 66      | IO2      | I   | HOME detection switch input terminal                                                                      |
| 67      | IO3      | O   | FocusDrv and signal output terminal                                                                       |
| 68      | DMOUT    | I   | Field equalizer PWM output terminal for IO0 and IO1<br>Disc equalizer PWM output terminal for IO2 and IO3 |
| 69      | CKSE     | I   | Usually open                                                                                              |
| 70      | DACT     | I   | DAC test mode terminal                                                                                    |
| 71      | TESIN    | I   | Test input terminal                                                                                       |
| 72      | TESIO1   | I   | Test input/output terminal                                                                                |
| 73      | VSS      | -   | Digital ground terminal                                                                                   |
| 74      | PXI      | I   | DPS-system clock oscillator circuit input terminal                                                        |
| 75      | PXO      | O   | DPS-system clock oscillator circuit output terminal                                                       |
| 76      | VDD      | -   | Digital + power supply terminal (5 V)                                                                     |
| 77      | XVSS     | -   | Ground terminal for system clock oscillator circuit                                                       |
| 78      | XI       | I   | System clock oscillator circuit input terminal                                                            |
| 79      | XO       | O   | System clock oscillator circuit output terminal                                                           |
| 80      | XVDD     | -   | For system clock oscillator circuit + power supply terminal                                               |
| 81      | DVSR     | -   | R channel D/A converting unit power supply terminal                                                       |
| 82      | RO       | O   | R channel data forward rotation output terminal                                                           |
| 83      | DVDD     | -   | D/A converting unit power supply terminal (5 V)                                                           |
| 84      | DVR      | -   | Reference voltage terminal                                                                                |
| 85      | LO       | O   | L channel forward rotation output terminal                                                                |
| 86      | DVSL     | -   | L channel D/A converting unit power supply terminal                                                       |
| 87-89   | TEST1-3  | I   | Test mode terminal                                                                                        |
| 90-93   | BUS0-3   | I/O | Data input/output terminal for microcomputer interface                                                    |
| 94      | VDD      | -   | Digital + power supply terminal (5 V)                                                                     |
| 95      | VSS      | -   | Digital ground terminal                                                                                   |
| 96      | BUCK     | I   | Clock terminal for microcomputer interface                                                                |
| 97      | CEE      | I   | Chip enable signal for microcomputer interface                                                            |
| 98      | TEST4    | I   | Test mode terminal                                                                                        |
| 99      | TSMOD    | I   | Test mode terminal                                                                                        |
| 100     | RST      | I   | Reset signal input terminal                                                                               |

