Preliminary TOSHIBA CMOS Digital Integrated Circuit Silicon Monolithic

T6K34

Row Driver LSI for Dot Matrix Graphic LCD

The TOSHIBA T6K34 is a row (common) driver for a small-to-medium-sized dot matrix graphic LCD.

The T6K34 has 168 outputs for LCD driver signals (common).

The T6K34 contains a power supply circuit with electronic volume enabling the LCD to be driven by a single power supply.

Thus, in combination with a T6K33/S6B0021 (by Samsung) segment driver, the T6K34 can be used to implement a low-power LCD system without the need for a separate power supply IC.

Unit: mm

T6K34	Lead Pitch	
	IN	OUT

Please contact Toshiba Agents for each Packaging Outline Dimensions.

TCP (Tape Carrier Package)

Features

- LCD drive outputs: 168 common outputs
- Operating voltage: V_{DD} = 1.8 V~3.3 V, V_{IN} = 2.7 V~3.6 V
  ($V_{DD} \leq V_{IN}$)
- LCD drive voltage: 28.8 V (max)
- Booster circuit: $V_{IN} \times (-6)$ max
- Contrast control: 64 steps (max)
- Partial display function
- CMOS process
- Package: Bump chip (COF), TCP (tape carrier package)
- Low power consumption: I_{SS} = 225 μA (typ.) …… Design target
  Conditions: $V_{DD} = V_{IN}$ = 3.0 V, using ×5 booster,
  LCD non-leaded, Ta = 25°C, 1/168 duty, 1/6 bias,
  PCK = 15 kHz, contrast = 20H
- Voltage regulator: Temperature coefficient = −0.0%/°C (typ.) ±0.04%/°C

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