WLED backlight driver devices designed for monitor and small-size panel TVs

With the successful release of the HT7943/HT7945 WLED backlight driver devices for Notebook/Tablet PC display applications, Holtek now announces the release of two new devices, the HT7953 and HT7955, for the monitor and small-size panel TV (less than 27 inches) WLED backlight driver application area.

The biggest difference between the new HT7953/HT7955 and the previous HT7943/HT7945 devices is that they can now drive a maximum LED string current of 80mA and can supply a total WLED power of up to 21W. They can be applied for use in Monitors and TV sizes of less than 27 inches. The HT7953/HT7955 devices respectively provide 6-channel and 8-channel LED current interfaces using a 40V process. A string of WLEDs can contain up to 10 individual WLEDs. The HT7953/HT7955 can respectively drive up to 60 or 80 LEDs. Their operating frequencies can be chosen to be either 200kHz or 400kHz.

The input voltage range is 10V to 26V. The maximum internal Power NMOS RDS(ON) has a value of 0.3 ohms and the maximum rated current value is 3.6 Amps. By detecting the LEDX pin voltage, these new devices provide both WLED open circuit and short circuit protection. Additionally, the devices also include over-voltage protection, current-limit protection and over-temperature protection as well as a UVLO function.

The HT7953/HT7955 are supplied in 7x7x1.0 mm 48-pin TQFP-EP package types, which provide reduced thickness and good heat dispersion properties.

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