The STA339BWS is an integrated solution of digital audio processing, digital amplifier controls and power output stage to create a high-power single-chip FFX digital amplifier with high quality and high efficiency. Three channels of FFX processing are provided. The FFX processor implements the ternary, binary and binary differential processing capabilities of the full FFX processor.

The STA339BWS is part of the Sound Terminal® family that provides full digital audio streaming to the speakers and offers cost effectiveness, low power dissipation and sound enrichment.

Also provided in the STA339BWS are a full assortment of digital processing features. This includes up to 8 programmable biquads (EQ) per channel. Available presets enable a time-to-market advantage by substantially reducing the amount of software development needed for functions such as audio preset volume loudness, preset volume curves and preset EQ settings. There are also new advanced AM radio interference reduction modes. Dual-band DRC dynamically equalizes the system to provide linear frequency speaker response regardless of output power level. This feature separates the audio frequency band into two sub-bands independently processed to provide better sound clarity and to avoid speaker saturation.

The serial audio data input interface accepts all possible formats, including the popular I2S format. The high-quality conversion from PCM audio to FFX PWM switching provides over 100 dB of SNR and of dynamic range.