

## 6 Audio application circuits

Figure 8. Typical audio application circuit (dual BTL) shows a stereo-BTL configuration capable of giving 210 W per channel into a 6  $\Omega$  load at 10% THD with  $V_{CC} = 52$  V. This result was obtained using the STA309A+STA516B demo board.

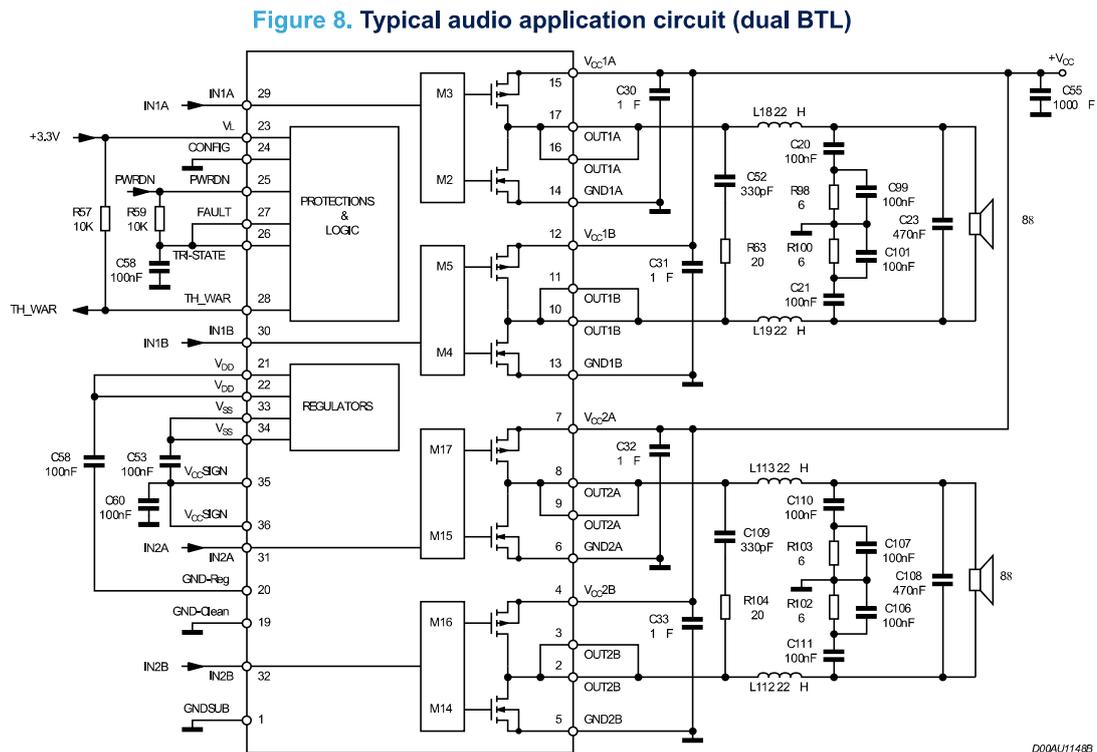


Figure 9. Typical Mono-BTL (PBTL) configuration below shows a single-BTL configuration capable of giving 400 W into a 3  $\Omega$  load at 10% THD with  $V_{CC} = 52$  V. STA516BE can also drive 2  $\Omega$  speakers as single-BTL configuration, to provide up to 280 W per channel at 10% THD with  $V_{CC} = 37$  V.

Figure 10. Typical quad half-bridge configuration (Quad Single Ended) below shows a quad-SE configuration capable of giving 110 W into a 3  $\Omega$  load at 10% THD with  $V_{CC} = 54$  V. STA516BE can also drive 2  $\Omega$  speakers as quad-SE configuration, to provide up to 80 W per channel at 10% THD with  $V_{CC} = 38$  V.

All results were obtained using the STA309A+STA516B demo board. Note that a PWM modulator as driver is required to feed the STA516BE.