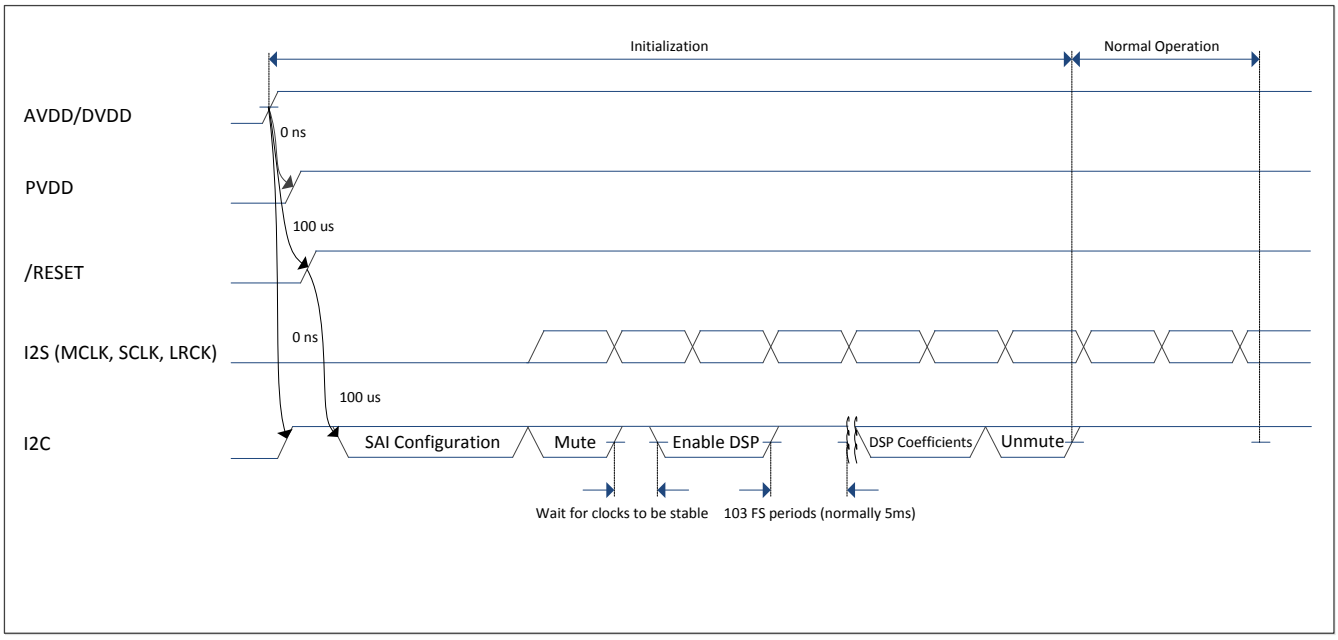
Appendix B Power-Up and Power-Down Sequence

B.1 Power-Up Sequence

1. Hold all digital inputs low and bring up power supplies (it doesn't matter if AVDD/DVDD or PVDD comes up first).
2. Hold $\overline{\text{RESET}}$ low and initialize digital inputs to their desired states. Wait at least 100 µs, pull $\overline{\text{RESET}}$ high and then wait at least another 100 µs.
3. Configure the SAI (Serial Audio Interface) as required via i2c and then start MCLK, SCLK and LRCLK (no sequence required).
4. Mute the device (write 0x11 to B0-P0-R3) or pulling low $\overline{\text{SPK\_MUTE}}$ pin.
5. Once clocks are stable, put the device into normal operation mode (write 0x00 to B0-P0-R2), and wait at least 103 FS periods (normally 5ms).
6. Start to program DSP coefficients. If a process flow with SmartAmp processing is used, like Process Flow 2, Process Flow 4 or Process Flow 6, it is required to download DSP instructions only after DSP has been reset (write 0x80 to B0-P0-R2).
7. Unmute the device (write 0x00 to B0-P0-R3) or pulling high $\overline{\text{SPK\_MUTE}}$ pin.
8. The device is now in normal operation.



B.2 Power-Down Sequence

1. Put the device into power down mode (write 0x01 to B0-P0-R2).
2. Wait at least 2ms and then pull $\overline{\text{RESET}}$ low.
3. The clocks can be stopped and the power supplies brought down after $\overline{\text{RESET}}$ has been low for at least 2 µs.
4. The device is now fully shutdown and powered off.