

## VS1011B Power-on timing of XRESET and BSYNC

We have seen that due to historical reasons, some customers have tied BSYNC to DVDD even though our minimum requirement is one initial low to high transition pulse.

You can try to fix it by creating RC delay by using 220k resistor tied to DVDD from BSYNC + 100nF capacitor from BSYNC pin to ground. RC of this is 22 ms which should be enough.

Also we have noticed that XRESET pin is tied with 33k to DVDD in many boards. This is wrong because then device never gets reset as XRESET follows DVDD. Fortunately, VS1011B has also build-in power-on reset but then you need to have fast enough rise time of DVDD. We have simulated that 10V/s rise time is enough for generating automatic power-on-reset without XRESET pin.

Below we have recommended timing. Keep XRESET pin low until DVDD has reached stable target value. Then keep BSYNC still about 10ms low in order to have XTALO to reach its dc operating point and oscillation amplitude.

Keep XRESET low until DVDD reaches minimum

