

# PCMB INFORMATION

Boards with removed LVDS and/or Audio option

Version: V3

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# AUDIO CONTROLLER

## Details regarding depopulated parts

- ✓ Removed Realtek audio controller IC and supporting parts like C and Rs.
- ✓ Removed audio connectors (IO shield, internal)

IO-Shield will not be adjusted due to high tooling costs. We will provide rubber caps to close open gaps in IO-Shield caused by the missing audio connectors.

## BIOS

There will be no special BIOS version for boards with removed audio option. No further adjustments in BIOS are necessary.

Audio circuit consists of two parts: The first part is the electrical interface and amplifier (which is affected by the removal). The second part is the HD AUDIO controller in platform chipset, which is responsible for the logical sound function. Audio/Sound output is still possible via onboard display (DP / DVI-D) connector if you connect a suitable display with digital audio function.

Just for information: Disabling audio support in BIOS will fully disable onboard HD audio controller, and therefore no audio output on onboard display (DP / DVI-D) is possible afterwards.

- ✓ [Advanced > Onboard Devices > "Audio Controller"] -> set to "Disabled"

## Operating System

Audio device is still visible in OS device manager (part of the chipset). Audio output still possible if you connect a suitable DisplayPort monitor with audio function.

# LVDS CONTROLLER

## Details regarding depopulated parts

- ✓ Removed DisplayPort-to-LVDS converter IC and supporting parts like C and Rs.
- ✓ Removed LVDS connector and backlight connector.

## BIOS [update V3]

There will be no special BIOS version\* for boards with removed LVDS option. By default, "LVDS Support" is disabled in BIOS setup, so no further user action is required. Related BIOS option:

- ✓ [Advanced > LVDS Configuration > "LVDS Support"] -> set to "Disabled"
- ✓ SetupItemID for Biosset and GabiSettings: ID: 0x013A, Value: 0x0001 (set as default)

The LVDS converter IC acts like an attached display to the system. LVDS converter is connected via DP interface to the LFP/eDP lanes of the CPU. If no LVDS converter IC is available, CPU/GPU does not see any attached device (due to the lack of missing DP\_HOTPLUG from converter IC). So it does not make any difference for the running system, if "LVDS Support" is enabled or disabled in BIOS. No LVDS controller + LVDS Support Enabled is a state similar to a not connected external DisplayPort monitor via cable on Rear-IO.

BIOS boot\* is not influenced with removed LVDS option, even with enabled LVDS support.

\* **D354x-Sx only:** BIOS >= R1.14.0 is necessary. D354x without LVDS support will have R1.14.0 ex-Factory. Downgrade is not possible.  
Check BIOS ReleaseDocument on FTP server for details.

## Operating System

No influence on operating systems. No LVDS converter IC is the same like a disconnected DisplayPort display via cable from Rear-IO.