

## ***TVP5150AM1 RAM Release Notes***

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## 1. Introduction

The TVP5150AM1 has embedded video decoding firmware revision v04.00.00 in the device on-chip ROM. The TVP5150AM1 device has a limited embedded RAM space which allows patch firmware code download possible. The patch can be used in improving decoder performance or fixing known decoder firmware bugs.

This document discusses the hardware and firmware issues related to the TVP5150AM1 and fixes made by the patch v04.90.02. The discussions also include performance improvement made by the patch, the differences between the patch and the TVP5150AM1 Data Manual.

## 2. Device & Firmware Affected

The information provided below is related only to the following device and firmware. Additional devices and firmware releases will have their own release notes.

**Table 1. Device & Firmware Affected**

Device	TVP5150AM1
Firmware	v04.90.02
Patch Size	4266 bytes
Data Manual	SLES209e.pdf

## 3. Device Related Issues

The following are the known firmware issues in the TVP5150AM1 ROM v4.00 device. Additional issues will be added to the list as they are discovered.

- Fixed day/night color issue. Video surveillance cameras sometimes disable the color (i.e. no color burst) at night. When the camera re-enables the color during the day, the color was previously not being properly restored at the TVP5150AM1 output.
- Modified the automatic level control (ALC) algorithm to maintain a stable output black level when the sync-tip is clipped. Previously, the output black level could become unstable when the sync-tip is clipped due to an interaction between the ALC and the automatic gain control (AGC) algorithms.
- Modified the system clock (SCLK) frequency to provide 720 active pixels per line for both NTSC and PAL. The SCLK frequency is 27.5MHz for NTSC and 27.75MHz for PAL.
- An external 10-kΩ pull-down resistor is required when the INTREQ/GPCL/VBLK output (pin 27) is disabled (bit 5 of I<sup>2</sup>C register 03h set to 0). The default power-up condition for Pin 27 is disabled.

## 4. Related Documentation

The following is the currently available related documentation.

**Table 2. Related Documentation**

Description	File Name	Purpose
TVP5150AM1 Patch Code Download Guidelines	slea093.pdf	Application note

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