Faroudja[®] Video Optimized[™] calibration program





STMicroelectronics

The reference of excellence for video quality

Expect more from your TV.
Full high-definition 1080p
displays have the potential to
deliver stunning image quality.
The Faroudja Video Optimized
calibration and branding program
ensures exceptional performance
with advanced techniques in video
processing and calibration for
vibrant and detailed images from
Blu-ray, cable, satellite and DVD
sources.



Calibration overview

The Faroudja Video Optimized $^{\text{TM}}$ logo and calibration program is a set of video algorithms and display calibration guidelines available for display manufacturers to optimize image quality and offer differentiation in the market.

Faroudja is leveraging their video processing technology and expertise with large screen home theaters to improve the next generation digital displays. The result is a display delivering maximum performance for the demanding customer using Blu-ray and high-definition sources.

The Faroudja brand is a proven and effective way to promote and differentiate a product's state-of-the-art video performance with the sales channels, trade press and consumers. When the Faroudja Video Optimized logo is displayed on products and marketing materials, it identifies them as a high-performance choice.

Calibration program overview

- ST field-support resources work with the TV or projector manufacturer to optimize the product to meet the reference guidelines that are then applied during the manufacturing process.
- These settings are stored as a new theme called Faroudja Movie. This theme is in addition to the standard themes such as Game, Vivid and Sport, and offers the consumer a simple solution for enjoying high-end results.
- Manufacturers provide a reference product to Faroudja Video Lab in Santa Clara, California for performance verification.
- This value-added service is only available to STMicroelectronics customers using video system-on-chips that include the Faroudja video processing IP.
- There are no royalties or fees associated with participation in the branding program or use of calibration tools.

On-screen results

The calibration program achieves optimal image quality and measurable results from HD Blu-ray and satellite/cable sources.

Some of the calibration benefits include:

- White level adjusted to deliver maximum contrast with linear gray scale and optimized backlight settings
- Black level adjusted for deep black level while resolving subtle shadow detail with linear gray scale
- Linear color temperature calibration using ST's Quickmatch tool and video processing optimization using the new Video Quality IP plug-in feature (VQ plug available in FLI7510 SoC)
- Faroudja RealColorTM settings of ACM-3D and ACC-3 applied to improve subtle dynamic contrast and color
- Noise reduction and sharpness adjusted for improved detail without excessive filtering or ringing
- Selecting the Faroudja Movie theme unlocks an advanced menu for the experienced user or product reviewer to fine-tune specific image parameters for their home theater installation



Faroudja Video Optimization allows for deep blacks while accurately displaying subtle shadow details



Faroudja Video Optimization produces vibrant, accurate colors with excellent detail from high-definition sources



Emmy® winning Technology



Products

| Part number | Description |
|-------------|--|
| FLI7510 | H.264 iDTV SoC for Internet-enabled LCD TV |
| FLI106xx | MPEG2 iDTV SoC for LCD TV |
| FLI326xx | Dual 10-bit triple ADC TV controller for analog TV and CE applications |
| STDP8028 | Video SoC with DisplayPort for multi-function monitor |

