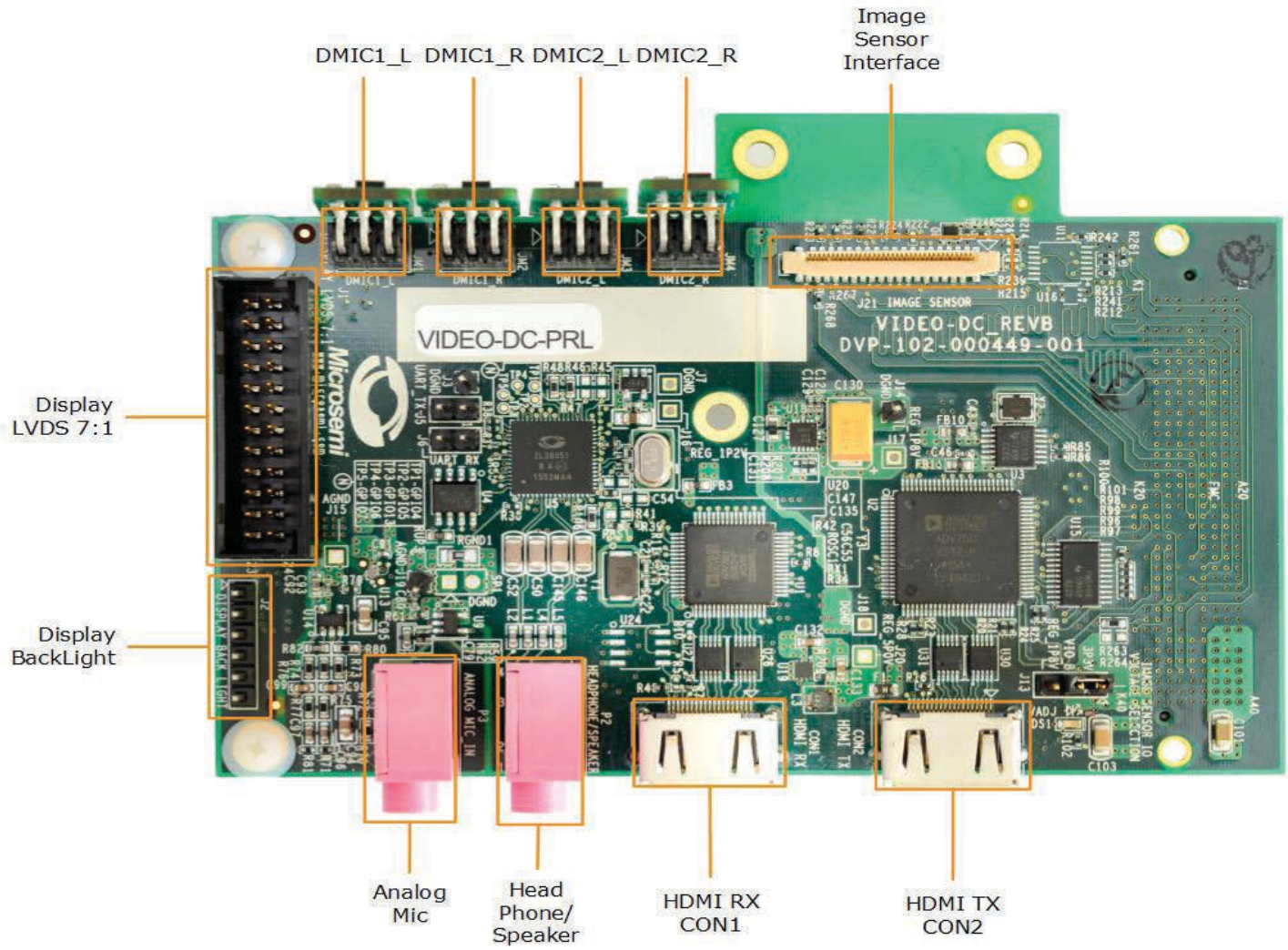
Imaging and Video Kit Quickstart Card

Kit Contents—VIDEO-DC-PRL

Quantity	Description
1	Imaging and video FMC daughter card for SmartFusion2 Advanced Development Kit
1	Image sensor camera module assembly LI-CAM-AR0330-P33 sensor module from Leopard Imaging with Aptina AR0330-P33 image sensor Flex cable LI-FLEX03 connected to sensor module Bracket attached to sensor module
1	Quickstart card for SmartFusion2 Imaging and Video Kit



Overview

The imaging and video FMC daughter card is an easy-to-use development platform for designing low power, high reliability, and secure imaging/video applications. The daughter card supports multiple interfaces for video and audio applications and the circuitry necessary for connection to product development kit. The daughter card kit has a camera sensor module mounted on a bracket which connects to sensor interface on the daughter card using a flex cable. The imaging and video daughter card connects with Microsemi's SmartFusion2 SoC FPGA Advanced Development Kit using FMC (FPGA Mezzanine Card) connector.

Microsemi's SmartFusion2 Advanced Development Kit offers a full featured 150K LE device, SmartFusion2 System-on-Chip (SoC) FPGA. This 150K LE device, inherently integrates reliable flash-based FPGA fabric, a 166 MHz ARM® Cortex®-M3 processor, advanced data security features, digital signal processing (DSP) blocks, static random-access memory (SRAM), embedded non-volatile memory (eNVM), and industry-required high-performance communication interfaces all on a single chip. This device also supports all the data security features available in SmartFusion2 devices.

Part Number	Description
M2S150-ADV-DEV-KIT	SmartFusion2 Advanced Development Kit

Hardware Features

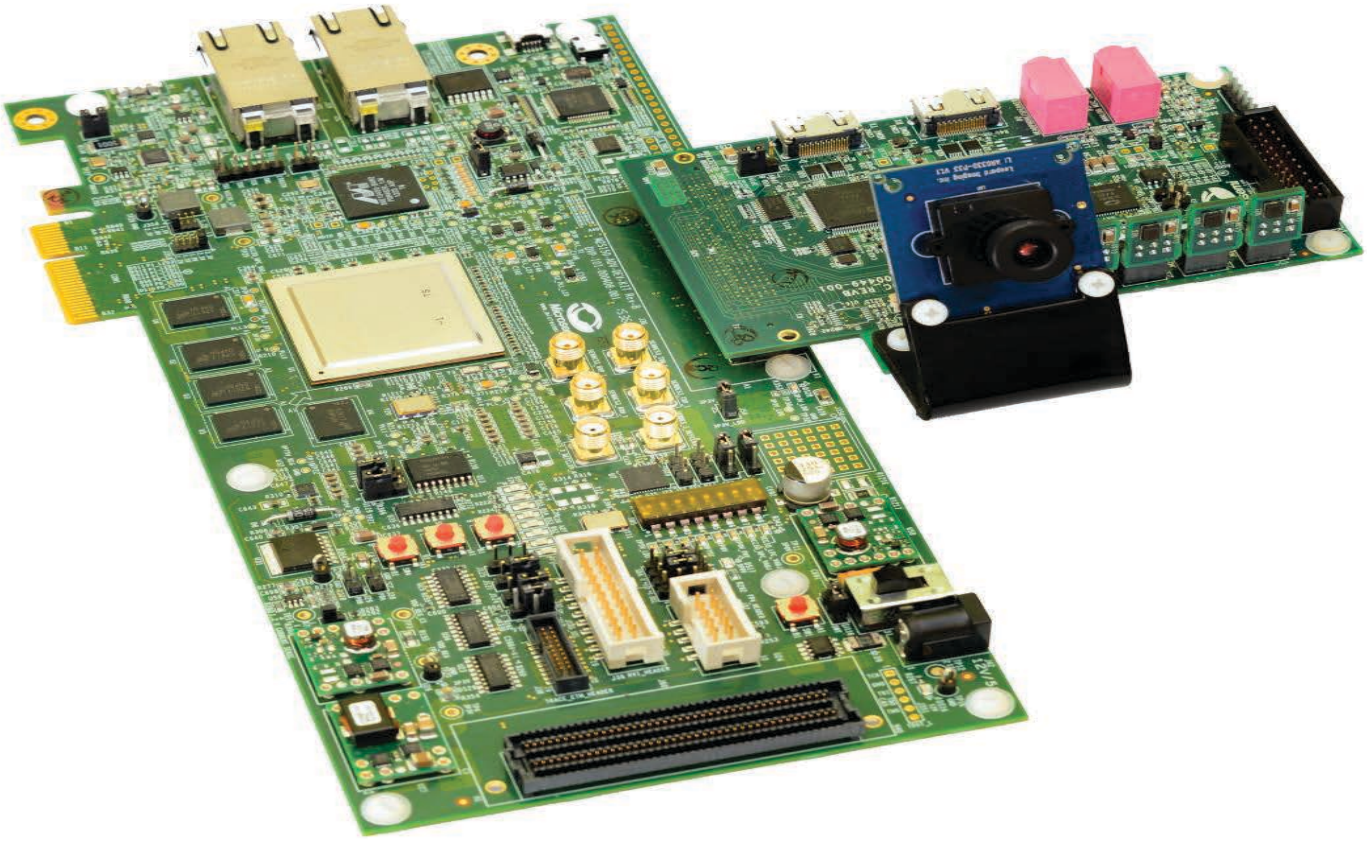
- HDMI Transmitter (ADV7511) and Receiver (ADV7611) chip sets and corresponding connectors
- LVDS 7:1 interface for connecting LCD
- Image sensor interface, which supports three different sensors: Parallel, MIPI, and HISPI
- Microsemi Audio Processor (Timberwolf ZL38051)
- Analog mic connector, analog headphone, and speaker connector
- Digital mics
- 100-pin FMC connector

PreProgrammed Demo Design

Run the following demos using the hardware setup, design files, and software:

- Camera sensor demo
- Edge detection demo
- Audio test

See the Documentation Resources section for more information.



Software and Licensing

Libero® SoC Design Suite offers high productivity with its comprehensive, easy-to-learn, easy-to-adopt development tools for designing with Microsemi's low power Flash FPGAs and SoC. The suite integrates industry standard Synopsys Synplify Pro® synthesis and Mentor Graphics ModelSim® simulation with best-in-class constraints management and debug capabilities.

The SmartFusion2 Advanced Development Kit (M2S150-ADV-DEV-KIT) is used as the product development kit for Imaging and Video FMC-based daughter card.

The SmartFusion2 Advanced Development Kit comes with a Free 1 Year Gold License.

Download the latest Libero SoC release
www.microsemi.com/products/fpga-soc/design-resources/design-software/libero-soc#downloads

Generate a Libero Gold license for your kit
www.microsemi.com/products/fpga-soc/design-resources/licensing

Documentation Resources

For more information about the Imaging and Video Kit, including user's guides, tutorials, and design examples, see the documentation at www.microsemi.com/products/fpga-soc/technology-solutions/imaging#getting-started

Support

Technical support is available online at www.microsemi.com/soc/support and by email at soc_tech@microsemi.com

Microsemi sales offices, including representatives and distributors, are located worldwide.
To find your local representative, go to www.microsemi.com/salescontacts

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