

DesignCore™ Camera Mezzanine Board OV5640

Quick Start Guide

1.0 Product Overview

The DesignCore™ Camera Mezzanine Board is paired with a 5MP micro camera module (OV5640) to enable rapid development of embedded vision applications.

Direct MIPI CSI-2 access to camera data allows more realistic evaluation of embedded vision designs. Direct access eliminates the need to decode USB or Ethernet protocols, resulting in lower power and higher performance.

The kit includes demonstration software running Linux to display 1080p video via HDMI. It is ideal for algorithm development, end application development, and evaluation of image sensors and optics.



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2.0 What's in the Box

Identify all the parts listed in **Table 1** (below):

Quantity	Part Number	Description
1	D3 CAMERA MEZZ OV5640	DesignCore™ Camera Mezzanine Board OV5640
1	LI-OV5640-MIPI-AF	OV5640 Camera Module

Table 1: Kit contents

3.0 Get Started

All instructions, binaries, source code, and troubleshooting guide are available on D3 Engineering's GitHub site. The DesignCore™ Camera Mezzanine Board currently supports the DragonBoard™ 410c by Arrow Electronics. Reference schematics for the Mezzanine Board are provided in the following section of this Quick Start Guide.

https://github.com/D3Engineering/410c_camera_support/wiki

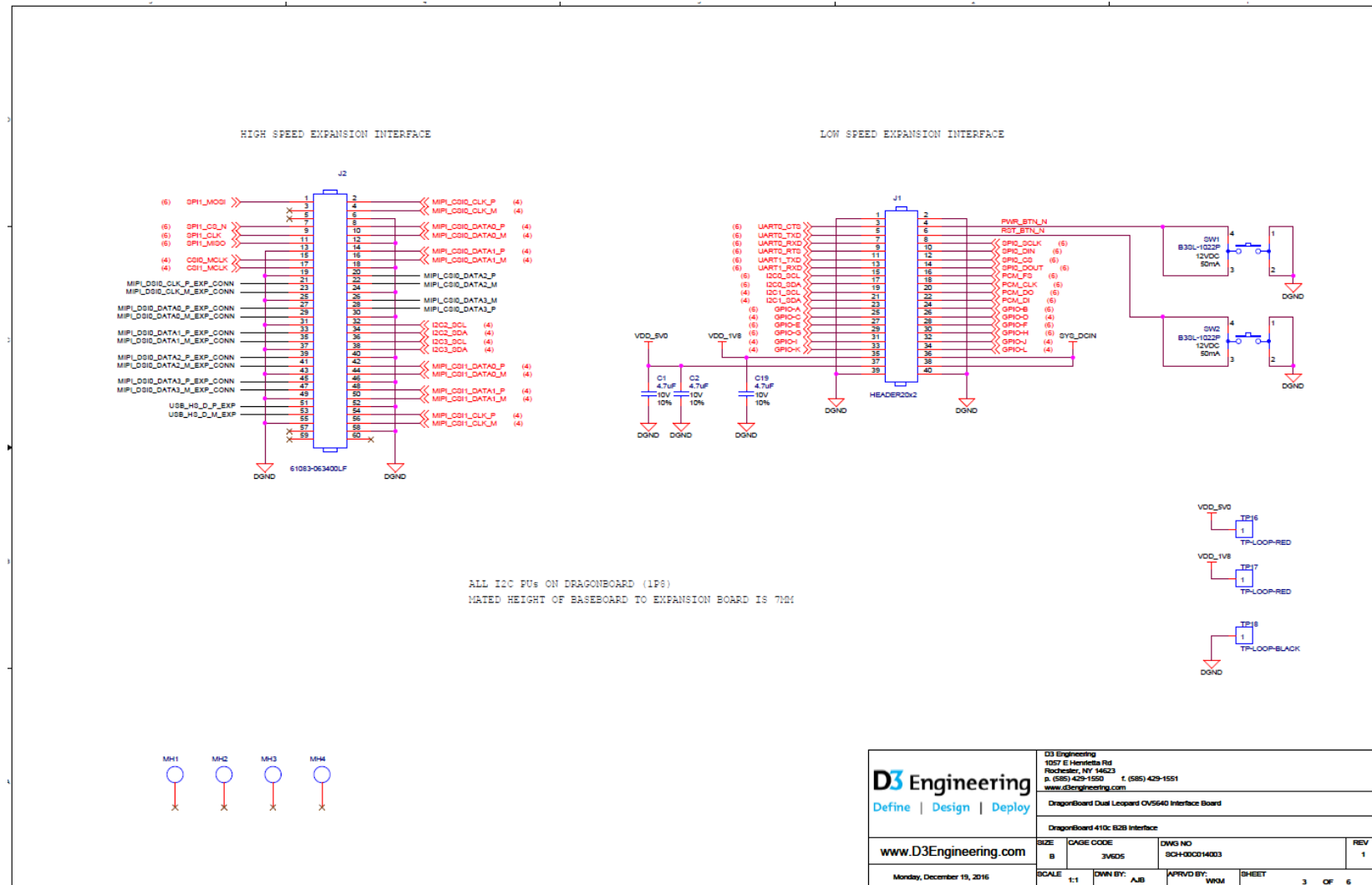


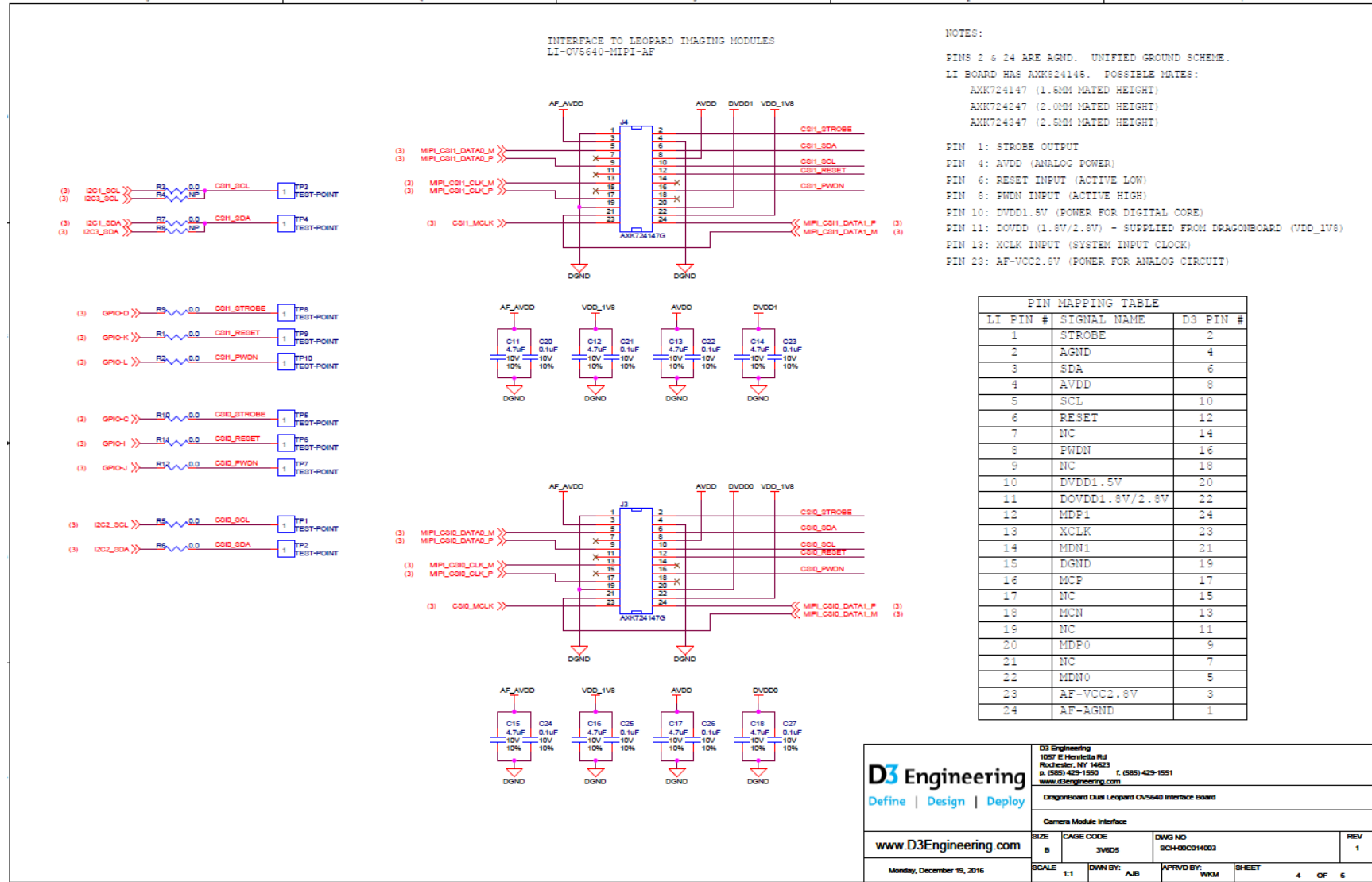
[D3Engineering/410c_camera_support](https://github.com/D3Engineering/410c_camera_support)

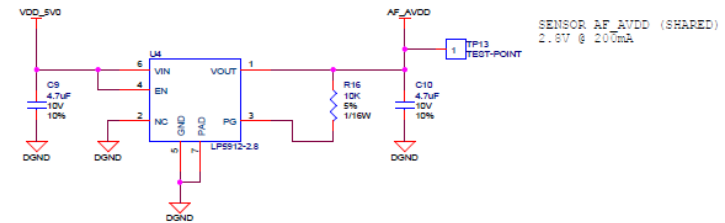
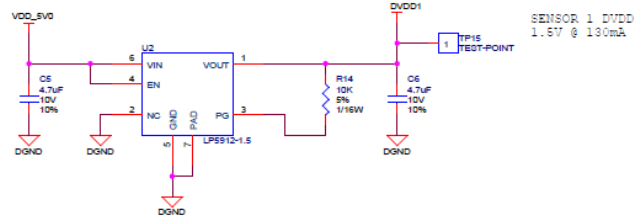
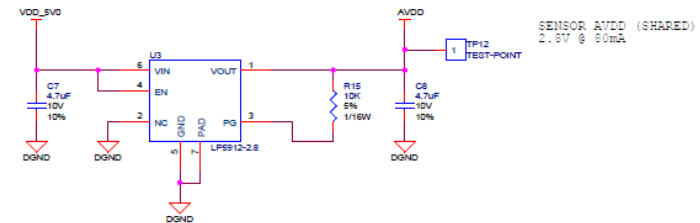
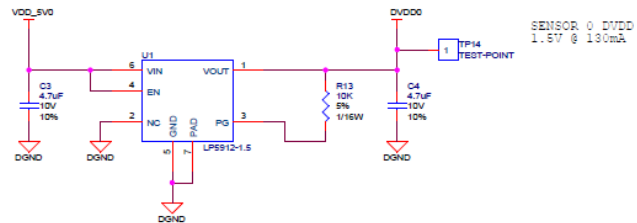
github.com

410c_camera_support - Example scripts, applications, and binaries for the 410c camera.

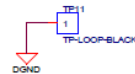
4.0 D3 CAMERA MEZZ OV5640 Schematics



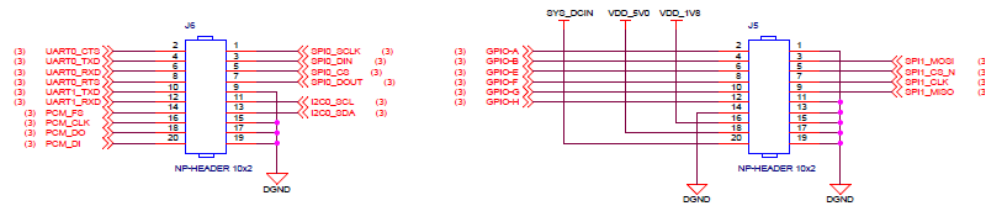




NOTE:
PIN 2, NC, TIED TO DGND SO OUTPUT
CAPACITOR CAN BE PLACED AS CLOSE
AS POSSIBLE TO IC. REFER TO DS
LAYOUT GUIDELINES.



D3 Engineering Define Design Deploy www.D3Engineering.com Monday, December 19, 2016		D3 Engineering 1057 E Henrietta Rd Rochester, NY 14623 p. (585) 429-1550 www.d3engineering.com DragonBoard Dual Leopard OV5640 Interface Board	
		Power Supplies	
SIZE B	CAGE CODE 3VEDS	DWG NO SCH-00014003	REV 1
SCALE 1:1	OWN BY AJB	APPROV BY WQM	SHEET 5 OF 6



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				DragonBoard Dual Leopard OV5640 Interface Board			
				Expansion Interfaces			
SIZE	CAGE CODE	DWG NO	REV	SIZE	CAGE CODE	DWG NO	REV
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Monday, December 15, 2016	SCALE 1:1	DWN BY: AJS	APPROV BY: WRM	SHEET	6	OF	6