CY4623 Optical Mouse with PixArt Sensor

Release Notes

This example code is a derivative of the CY4623 enCoRe II Optical Mouse Reference Design Kit. The base design was implemented with an Avago ADNS-2620 (formerly Agilent ADNS-2620) sensor and the enCoRe II CY7C63813-PXC. This project adds support for the PixArt PAN3101 optical sensor, but is provided as an electronic package only – there is no physical kit. Customers who wish to obtain actual hardware for evaluation should purchase the CY4623 kit.

Important notes/features:

1. This firmware supports both the enCoRe II + Avago ADNS-2620 sensor and enCoRe II + PixArt PAN3101 sensor. The firmware can be configured for either sensor. The default setup is for the PixArt PAN3101 sensor. To build for the Avago ADNS -2620 sensor enable the #define Agilent_enable in optical.c
3. When using the enCoRe II + PixArt PAN3101 build option, sensor resolution (400cpi or 800cpi) can be selected by strapping of IO pin P0.0. When P0.0 is connected to GND resolution is set to 800cpi. When connected to VDD resolution is configured to 400cpi
4. The PixArt sensor dimension are equivalent to the Avago ADNS-2620 sensor, therefore the same hardware reference can be used.
5. All other features in the design are equivalent to those in the CY4623 reference design kit. Refer to the materials in that kit for further details. Design materials are also available for download from the Cypress website.
6. This development environment for this build of firmware is PSOC designer 4.2 1013, service package 3.

Note: This example is provided as a reference only. It has not gone through validation testing like traditional Cypress reference designs. Customers using this firmware should thoroughly test their products to ensure that the code conforms to their design requirements.