



Orca Family

The Orca family consists of the **D2500/D2500R**, **D1600/D1600R** and **D1500/D1500R** chipsets optimized for video surveillance / security cameras. The Orca family is the second generation Pixim chipset architecture that delivers advances in image processing to achieve improved resolution, image quality, and low light performance. Among the new features in the D2500 chipset is support for sending video over unshielded twisted pair (UTP) wiring common in many office environments to reduce installation costs. The Orca family also has reduced power and improved video performance over temperature that makes it an ideal choice for high-performance wide dynamic range dome cameras.

Each chipset includes an entire video signal processing chain, providing a programmable digital image sensor with an integrated frame buffer memory and an advanced digital image processor optimized for the sensor that includes automatic exposure, white balance, color correction, and video generation.

The D2500, D1600 and D1500 chipsets are available in a choice of color filter arrays, either a CMY (cyan / magenta / yellow) pattern or an RGB (red / green / blue) pattern. Each color filter array (CFA) has benefits for particular applications and camera manufacturers can select the CFA based on the desired characteristics of each camera. The D2500, D1600 and D1500 chipsets include sensors with CMY color filter arrays. The D2500R, D1600R and D1500R chipsets include sensors with the RGB color filter arrays.

The D1500 contains the features necessary to allow camera manufacturers to build high-performance, high-quality, wide dynamic range TV cameras supporting both the NTSC and PAL standards with a single design.

The D1600 contains the features necessary to allow camera manufacturers to build high-performance, high-quality, wide dynamic range TCP/IP cameras.

The D2500 adds additional features to the D1600 and D1500 to enable cameras with even more advanced features. Some additional features in the D2500 include:

- Digital video output for network / IP cameras
- Serial port for remote control
- Day / night mode to improve performance in low-light situations
- Digital pan / tilt / zoom
- Activity detection alarms
- Advanced synchronization functionality (Genlock)
- Progressive output mode
- Advanced privacy masks
- Support for unshielded twisted pair (UTP) cabling