Teledyne DALSA’s new Genie TS combines the latest image sensor technology—including Teledyne DALSA’s own advanced CMOS devices—with a newly optimized camera platform that delivers the widest, most powerful feature set ever in a GigE Vision camera.

**SENSOR CONTROL**
- Up to 12 megapixel resolution
- Higher frame rates in burst and partial scan mode
- High Dynamic Range - Multi-slope function
- Binning - Horizontal and vertical
- Auto-Brightness Control - Auto-exposure - Auto-gain (AGC) - Auto-iris
- Multiple Exposure Times - Different exposure times per image - Cycling method is user-controllable
- Multiple Gains - Different gain settings for every image - Cycling method is user-controllable
- Moving ROI - New ROI positions for every image - Cycling method is user-controllable
- Cycling Modes - Cycling of feature values can change upon software command every x number of frame(s) or on an external input signal

**DATA PROCESSING**
- Multiple Flat Field Correction (FFC) with pixel correction - Different FFC per image - Cycling method is user controllable
- Multiple look-up tables (LUT) - 4 available LUTs (mono) - 1 RGB and luminance LUT (color) - Different LUTs per image
- Motion Detection - Image capture based on motion detection
- Color Correction - Color balancing with CCT preset - Auto-white balance (or manual control) - Color space conversion
- Image Filtering - Smoothing /sharpness filters for monochrome models
- Image Compression - JPEG format, user-controlled parameters

**I/O VERSATILITY**
- Networking - Gigabit Ethernet interface
- Power over Ethernet (POE)
- Auxiliary Input Power - 12 - 24V input
- I/O - 4 general purpose outputs - 4 general purpose inputs with programmable thresholds
- Auto-Iris - 4-pin connector for video or DC iris - Motorized iris control available on the 25-pin micro-D connector
- Motorized Lens Control - Zoom and focus control available on the 25-pin connector
- Serial Control - RS-232 and RS-485 serial port output offers remote access from PC to serial devices around the camera (like PTZ)
- General Purpose Timer and Counter - Generate events based on user defined timer or counter

**ADVANCED CAPABILITY**
- Meta Data - Latches current camera values with images, including timestamp, exposure, and more
- Image-On-Demand - Auto mode – automatically send images to PC as acquired - Manual mode – camera can store acquired images in memory and transfers when needed
- Pre-Trigger - Loop buffer functionality allows acquisition of multiple images BEFORE (and after) the actual trigger event
- Multicasting - Image multicasting – images sent out to multiple computers for parallel processing - Simultaneously control multiple cameras with a single software command
- IEEE1588 - Built-in feature for multiple camera synchronization - Precise time protocol – time stamping images with microsecond accuracy