

## Rafael Microelectronics Launches Advanced RT18X Series for USB-C, DP and HDMI AOC Market

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The RT18X series offers four transmitter/receiver pairs: (1) RT180/RT181 supporting HDMI 2.0/DP 1.3 with 24Gbps bandwidth; (2) RT182/RT183 supporting HDMI 2.1/DP 1.4 with 48Gbps bandwidth; (3) RT184/RT185 supporting HDMI 2.1/DP 1.4 with 48Gbps bandwidth plus additional 1Gbps TX/RX channel for full AOC applications and (4) RT186/RT187 supporting HDMI 2.1/DP 1.4 48Gbps plus USB3 10Gbps TX/RX channel for USB-C AOC applications. RT18X utilized at TSMC advanced CMOS process to achieve low power consumption with high reliability. Transmitter power consumption is less than 200mW and the receiver can draw power from in-band signal with less than 300mW power consumption. Configurations in the product series provides backward compatibility to reduce manufacturers' O/E module development effort for time to market. RT18X series also support latest industry standards such as USB-C AOC applications.

Ted Sun, Rafael Micro CEO, commented, "The RT18X series has high sensitivity and high trans-impedance gain for matching various photo detectors. It can drives VCSEL laser supporting multi-lane transmission up to 300 meters. " Compared to metal wires, optical cables are inherently thin & lightweight, high-speed and free from interference with extremely low signal loss and distortion over long distances. Thin lightweight high-speed cabling is highly desirable for 4K/8K UHD TV video and virtual reality (VR) glasses/helmets in the home. "Advanced applications for high speed and strong noise immunity include lossless HD medical imaging and in-vehicle connection systems that must be resistant to engine electrical surge. Optical transmission is highly immune to electrical noise so RT18X products can be used in special applications such as mega factories, video surveillance systems, government facilities, etc." Ted added.

High-frequency RF design has always been a key competitive advantage of Rafael Microelectronics. The RT18X ??series performance has been verified by third party standard certification laboratories and it scores high in the compatibility index via confirmed operation with 80+ different TVs, set-top boxes, computers and tablets. The RT18X ??series is already in mass production as one of the best active optical cable (AOC) solution.

### About Rafael Microelectronics, Inc.

Rafael Microelectronics is a Taiwan fabless IC design company with high frequency broadband RF design as its core technology. Products include 4K/8K UHD TV silicon tuners, STB RF tuners, satellite LNB down-converters, Ethernet, PON, HDMI, DP, USB optical transceivers and Bluetooth, Sub-GHz RF for IOT market.

More information available at company website: <http://www.rafaelmicro.com/>

### Related Sectors:

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### Related Keywords:

Rafael Micro :: HDMI :: DP :: USB :: AOC :: Optical Communication :: rt18x :: Ted Sun :: 8k TV :: VCSEL :: PD ::

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