

Current Status of TSN Standards

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SECURE CONNECTIONS
FOR A SMARTER WORLD

IEEE 802.1 Automotive AVB and TSN Standards Handout

	Transport	Synchroni- zation	Stream Reservation	Quality of Service	Redundancy	Security
<u>AVB</u> 802.1BA-2009 The AVB Profile	1722-2011 Media Transport Protocol	802.1AS-2011 gPTP	802.1Qat-2010 SRP (now Q clause 35)	802.1Qav-2009 Credit Based Shaper (now Q clause 34)	-	802.1X-2010 802.1Xbx-2014 802.1Xck-2018 Network Access
<u>TSN</u>	1722-2016 Adds CAN, FlexRay, LIN, + more Audio/Video Transports	802.1AS-Rev Redundant gPTP	802.1Qcc-2018 Enhanced SRP 802.1Qca-2015 Path Control & Reservation	802.1Qbv-2015 Time Aware Shaper 802.1Qbu-2016 & 802.3br-2016 Preemption 802.1Qch-2017 Cyclic Queue Forwarding 802.1Qcr Asynchronous Shaping	802.1CB-2017 Frame Replication & Elimination 802.1AS-Rev Redundant gPTP	802.1Qci-2017 Policing 802.1AEcg-2017 (end-to-end) MACSec

IEEE 802.3 Automotive Ethernet PHY Standards Handout

	10 Mbit/s	100 Mbit/s	1000 Mbit/s	2500 Mbit/s	10 Gbit/s	Next
<p>MAC Interface</p> <p>Digital/ SERDES</p>	<p>SNI, xMII/ SGMII OC-SGMII</p>	<p>xMII/ SGMII OC-SGMII</p>	<p>xGMII/ SGMII OC-SGMII 1000BASE-X</p>	<p>OC-SGMII 2500BASE-X</p>	<p>USXGMII XFI</p>	<p>?</p>
<p>Media Interface</p> <p>Single Twisted Pair</p>	<p>802.3cg</p> <p>10BASE-T1S 15m Point to Point 25m Multi-Drop</p> <p>10BASE-T1L 1000m Point to Point</p>	<p>802.3bw-2015</p> <p>100BASE-T1 15m Point to Point</p>	<p>802.3bp-2016</p> <p>1000BASE-T1 15m Point to Point</p>	<p>802.3ch</p> <p>2500BASE-T1 15m Point to Point</p>	<p>802.3ch</p> <p>10GBASE-T1 15m Point to Point</p>	<p>?</p>



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