Electronics

Electronics - $ billions

World Region	2016	2018	2020	2022	2024	2026	2028	2030
Total	9	12	15	19	24	33	44	56
Africa	0.15	0.19	0.24	0.31	0.39	0.53	0.71	0.90
CIS	0.22	0.29	0.36	0.46	0.58	0.80	1.06	1.35
East Asia	5.66	7.55	9.44	11.95	15.10	20.76	27.68	35.23
Eastern Europe	0.15	0.19	0.24	0.31	0.39	0.53	0.71	0.90
Middle East	0.07	0.10	0.12	0.15	0.19	0.27	0.35	0.45
NAFTA	1.74	2.32	2.90	3.68	4.65	6.39	8.52	10.84
South & Central America	0.15	0.19	0.24	0.31	0.39	0.53	0.71	0.90
West Asia	0.15	0.19	0.24	0.31	0.39	0.53	0.71	0.90
Western Europe	0.73	0.97	1.21	1.53	1.94	2.66	3.55	4.52

Electronics Manufacturers are Moving Ahead with IIoT

- At **Siemens'** electronics manufacturing plant in Amberg, Germany, machines and computers handle 75% of the value chain autonomously, with some 1,000 automation controllers in operation from one end of the production line to the other. Parts being produced communicate with machines by means of a product code, which tells the machines their production requirements and which steps need to be taken next. All processes are optimized for IT control, resulting in a minimal failure rate. Employees are essentially supervising production and technology assets, including handling unexpected incident

- **Cisco.** To better orchestrate its global network of outsourced production plants, Cisco developed a "virtual" manufacturing execution system platform (VMES), which provides real-time visibility of production operations. The system leverages technologies such as cloud, Big Data analytics and the Internet of things to connect and gather real-time information from production machines, enabling predictive quality capabilities in a fully outsourced manufacturing environment.

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