Global MOSFET Device Market Overview

MOSFET chips are classified based on application voltage, with 40V and 100V remaining the dominant application segments, together accounting for nearly 90% of the total MOSFET market share. Among these, the automotive sector is the largest application field for low-voltage MOSFETs.



Data Source: YOLE

According to YOLE, by device type in 2028, the largest application markets for Si MOSFET single devices will be the automotive, consumer electronics, and industrial automation sectors, with market sizes of \$3.234 billion, \$2.468 billion, and \$1.328 billion, respectively. However, the compound annual growth rates (CAGR) for these three sectors are expected to remain relatively low, with the consumer electronics sector even experiencing a decline of -2.9%. The fastest-growing sectors are the electric vehicle and photovoltaic industries, with CAGRs of 16.4% and 10.2%, respectively.



Data Source: YOLE

According to YOLE, by 2028, the largest application markets for Si MOSFET module

products will be the automotive, industrial automation, and data center sectors, with market sizes of \$160 million, \$69 million, and \$75 million, respectively. However, the compound annual growth rates (CAGR) for these three sectors are expected to remain relatively low, at 4%, 2.8%, and 4.2%, respectively. The fastest-growing sectors are the electric vehicle and photovoltaic industries, with CAGRs of 21.8% and 14%, respectively.



Data Source: YOLE