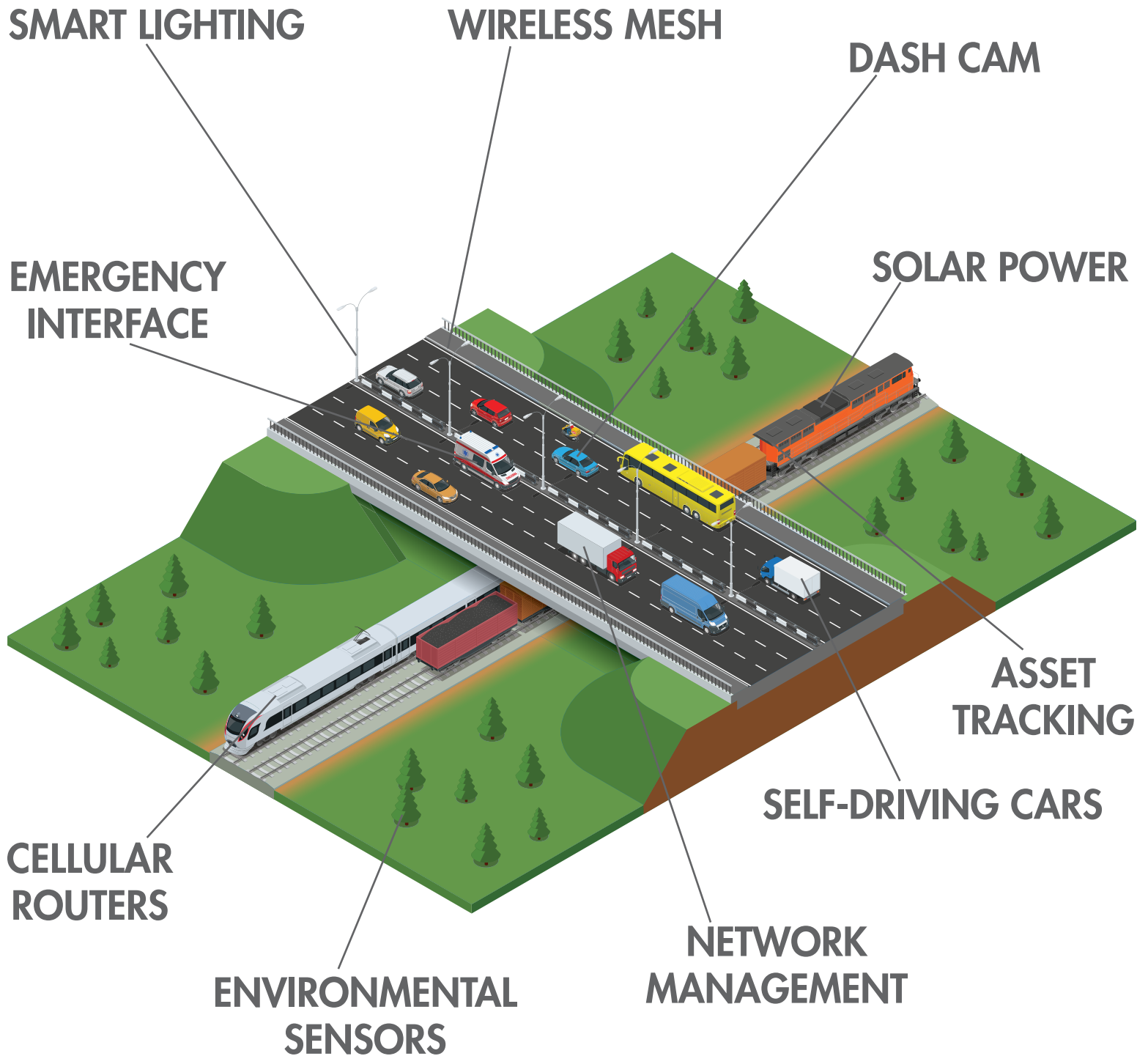


TECHNOLOGY TEARDOWN

SMART TRANSPORTATION



COMPONENT	DESCRIPTION	SUPPLIERS	PRODUCTS	DEVELOPMENT KITS
SENSORS				
Optical	Ambient Light, Proximity, Ultraviolet, Infrared,	Silicon Labs, Murata, iC-Haus	<u>Ambient Light</u> : Si1120, Si1153, XS-Z16-CB2R <u>Ultraviolet</u> : Si1133 <u>Infrared</u> : IRA Series, Si1153 <u>Proximity</u> : Si1102, Si1153, Si1120	115xOPT-EXP-EVB, LT-1PA01, IMX-070
Humidity	Sensor IC, Battery Powered	Silicon Labs, Digi	Si7023, Si7034, XS-Z16-CB2R	Si7022-23-EVB, Si7034-EVB
Temperature	Sensor IC, Thermistor	Silicon Labs, Digi, Murata	Si706x, Si7007/22/23, XS-Z16-CB2R, PTFL/NCU/NXF Series	Si7022-23-EVB, Si7060-EVB MTHMR-N-0002A
Magnetic	AMR, Hall Sensor	Silicon Labs, Micronas, iC-Haus, Murata	<u>AMR</u> : MRMS591, iC-SM2L <u>Hall Sensor</u> : Si7210, HAL 37xy, HAL 24xy, Si721x	HAL-APB V1, HAL USB-Kit
Motion	Accelerometer, Gyroscope, Accel/Gyro combo, Pressure, Compass	Murata, InvenSense	<u>Accelerometer</u> : SCA800, SCA2100, SCA3100, SCA3300 <u>Gyroscope</u> : ISZ-2510, IXZ-2510, ITG-1010 <u>Accel/Gyro combo</u> : ICM-20602, ICM-20789, ICM-20948 <u>Pressure</u> : ICP-101xx <u>Compass</u> : ICM-20948	MEMS-EVAL-BOARD, MEX-1031, AN-IVS-0001EVB
Ultrasonic	Range detection	Murata	MA300D1, MA40S4R, MA40S4S, MA58MF14	MAX-15-0082
PROCESSOR				
MCU	8-bit	Silicon Labs	EFM8 Bee Series	SLSTK20/00A/01A/10A/30A
	32-bit	Silicon Labs, Redpine, GigaDevice	EFM32 Gecko Series, RS12000 SmartMCU, GD32 Cortex M3, GD32 Cortex M4	EFM32WG-STK3800, SLSTK3701A, SLSTK2030A, SLSTK2001A
WIRELESS COMMUNICATION				
Cellular	LTE Cat-1/M1/NB-IoT	Telit, Digi, MultiTech, NimbleLink, Janus	<u>Cat-M1/NB-IoT</u> : ME910C1, ME866A1, ML865C1, MultiConnect Dragonfly Nano, SocketModem Cell <u>Cat-1</u> : LE910, LE866, MultiConnect Dragonfly	LTE-IN-A-BOX Dev Kit
LoRa	LPWAN	MultiTech, Murata	MultiConnect x Dot, MultiConnect mDot, CMWX1ZZABZ	
WiFi	802.11a/b/g/n/ac	Silicon Labs, Murata, Realtek, Taiyo Yuden, Lantronix	WGM110, AMW007, Type1HD, WYSBHVXGXG, xPico 240	WBSBHVXGXG, Cypress WICED, Wizard Gecko, AMW007-E04
Bluetooth	Classic, Low Energy, Mesh	Nordic, Silicon Labs, Murata, Taiyo Yuden, Redpine	nRF52840, BGM13P/13P2, BGX13P/S, EYSKBNZWB, RS13100, MBN52832	SLEXP8027A, Bluegiga WTxx, EKSKBNZWB, nRF52 DK, MBN52832DK
Multi-Protocol	WiFi + Bluetooth + others	Redpine, Murata, Lantronix	RS14100, RS9116, RS9113, LBEE59B1LV, LBEE5PA1LD, xPico 250	Cypress WICED
Zigbee	IEEE 802.15.4	Digi, Silicon Labs, Redpine, Decawave	Digi XBee3, RS13100, MGM13S, MGM12P, DW1000, DWM1000	SLWRB4305E, SLWRB4304A
GNSS	GPS, GLONASS, Galileo, BeiDou	Telit, Taiyo Yuden, MediaTek	SE878, SE868, SL869, SE873	SL869-EVK, SE873-GNSS-EVK
Gateways	Wifi, Zigbee, Bluetooth, Cellular, LoRa	Digi, MultiTech	Digi WR44/54/64, Digi ConnectPort X4, Digi XBee Gateway, Digi Connect Sensor+, MultiConnect Conduit	
WIRED COMMUNICATION				
Ethernet Interface Controller	10/100M, 10/100/1000M Gb	Realtek	RTL8153 (USB3.0), RTL8111F/G (PCIe), RTL8168 (PCIe), RTL8100B (PCIe)	
Ethernet PHY	10/100M, 10/100/1000M Gb	Realtek	RTL8214, RTL8218, RTL8208, RTL8195AM	RTL8195-DK
Ethernet Switch Controller	10/100/1000M Gb	Realtek	RTL8305NB-CG (5-port), RTL8309M-CG (9-port), RTL8324E-CG (24-port)	
Embedded Device Server	10/100M, 10/100/1000M Gb	Digi, Lantronix, MultiTech	<u>RJ45 module</u> : XPort Pro/Edge, Rabbitcore MiniCore RCM6700, Connect ME 9210 <u>UART SMT module</u> : xPico 110	XP10010NMK-01, 101-1327
External Device Server	10/100M, 10/100/1000M, Gb RS232/422/485	Digi, Lantronix	UDS1100 (1-port to Ethernet), ConnectPort LTS 8/16/32 (8,16,32-port to Ethernet)	
POWER OVER ETHERNET (PoE)				
Powered Device Interface	IEEE 802.3af/at/bt	Silicon Labs, Silvertel, MPS	<u>Interface IC</u> : Si3402, Si3404, Si34061, MP8008/7/5/4 <u>Module</u> : Ag9900, Ag9800, Ag9700, Ag9312, Ag5300, Ag5800	Si34061ISOC4-KIT, Si3404BKC2-KIT, EV8004-QW-00A
PSE Controller	IEEE 802.3af/at/bt	Silicon Labs, Silvertel	<u>Controller IC</u> : Si3459, Si3454 <u>Module</u> : Ag6100, Ag6110, Ag6800	Si3454-KIT, Si3459-KIT, EVALAG6100