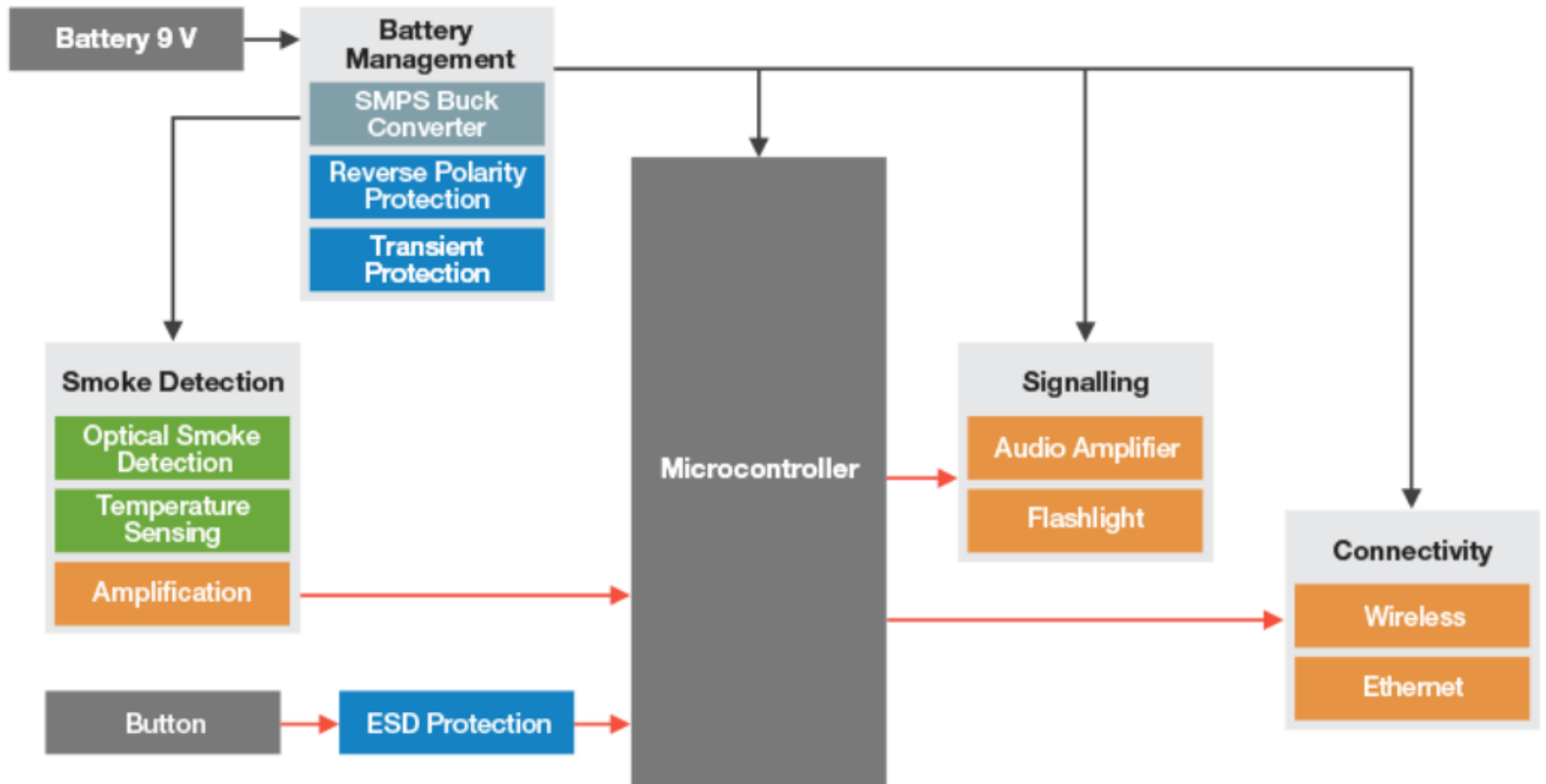


Smoke Detector - Block Diagram



Smoke Detector - Parts

BATTERY MANAGEMENT - SMPS BUCK CONVERTER

CAPACITOR

Product Name	Status	Description	Features	Package	Q-Level
TP3		Solid Tantalum Surface Mount Chip Capacitors	0.1uF...470uF; 4V...50V	A...E	

DIODE

Product Name	Status	Description	Features	Package	Q-Level
SD103AWS		Small signal schottky diode	If=350mA	SOD-323	

INDUCTOR

Product Name	Status	Description	Features	Package	Q-Level
IDCP-2218		High Current Surface Mount Inductors - Non-Shielded	10uH...220uH 0.35A...1.44A	5.8x4.5x5.2mm	

MOSFET

Product Name	Status	Description	Features	Package	Q-Level
2N7002K		N-Channel 60-V (D-S) MOSFET	Rdson=20hm; Id=300mA	SOT-23	

BATTERY MANAGEMENT - REVERSE POLARITY PROTECTION

MOSFET

Product Name	Status	Description	Features	Package	Q-Level
Si1021R		P-Channel 60V (D-S) MOSFET	Rdson=40hm	SC-75A	

BATTERY MANAGEMENT - TRANSIENT PROTECTION

DIODE

Product Name	Status	Description	Features	Package	Q-Level
MMSZ5225-G to MMSZ5267-G		Small signal Zener diode	Vz 3...75V	SOD-123	

Smoke Detector - Parts

SMOKE DETECTION - OPTICAL SMOKE DETECTION

IR EMITTER

Product Name	Status	Description	Features	Package	Q-Level
VSMY2850		High Speed Infrared Emitting Diodes	850nm	2.3x2.3x2.8mm	

IR RECEIVER

Product Name	Status	Description	Features	Package	Q-Level
VEMD2003		Silicon PIN Photodiode	750nm...1050nm	2.3x2.3x2.55mm	

SMOKE DETECTION - TEMPERATURE SENSING

NTC

Product Name	Status	Description	Features	Package	Q-Level
NTCS0603		Glass protected NTC Thermistor	2kOhm...100kOhm	'0603	

SMOKE DETECTION - AMPLIFICATION

RESISTOR

Product Name	Status	Description	Features	Package	Q-Level
MC-Series		Professional Thin Film Chip Resistors	10hm...4.99MOhm	0402...1206	

TEST BUTTON - ESD PROTECTION

DIODE

Product Name	Status	Description	Features	Package	Q-Level
GL05T		Low Capacitance ESD Protection Diodes	300W	SOT-23	

Smoke Detector - Parts

SIGNALING - AUDIO AMPLIFIER

INDUCTOR

Product Name	Status	Description	Features	Package	Q-Level
IHLD-3232HB-5A		Low Profile, High Current Dual Inductors	5uH...33uH 2.4A...6A	3232	

MLCC

Product Name	Status	Description	Features	Package	Q-Level
VJ...31X RoHS Automotive MLCC		Surface Mount Multilayer Ceramic Chip Capacitors for Automotive Applications	120pF...1uF 16V...1000V	0402 to 1812	

MOSFET

Product Name	Status	Description	Features	Package	Q-Level
SiS488DN		N-Channel 40V (D-S) MOSFET	Rdson=5.5mOhm	Power PAK 1212-8	

RESISTOR

Product Name	Status	Description	Features	Package	Q-Level
MC-Series		Professional Thin Film Chip Resistors	10hm...4.99MOhm	0402...1206	

SCHOTTKY DIODE

Product Name	Status	Description	Features	Package	Q-Level
SS2P4		High Current Density Surface Mount Schottky Barrier Rectifier	If=2A Vf=0.5V Vrrm=40V	'DO-220AA (SMP)	

Smoke Detector - Parts

SIGNALING - FLASHLIGHT

LED

Product Name	Status	Description	Features	Package	Q-Level
VLMD31...		Standard SMD LED PLCC-2	648nm	PLCC-2	

MOSFET

Product Name	Status	Description	Features	Package	Q-Level
SI2356DS		N-Channel 40V (D-S) MOSFET	Rdson=5.1mOhm	SOT-23	

Smoke Detector - Parts

CONNECTIVITY - WIRELESS

MLCC

Product Name	Status	Description	Features	Package	Q-Level
VJ...31X RoHS Automotive MLCC		Surface Mount Multilayer Ceramic Chip Capacitors for Automotive Applications	120pF...1uF 16V...1000V	0402 to 1812	

MOSFET

Product Name	Status	Description	Features	Package	Q-Level
Si7308DN		N-Channel 60V (D-S) MOSFET	Rdson=58mOhm	Power PAK 1212-8	

RESISTOR

Product Name	Status	Description	Features	Package	Q-Level
TNPW		High Stability Thin Film Flat Chip Resistors	4.7Ohm...3MOhm	0402...1210	

SCHOTTKY DIODE

Product Name	Status	Description	Features	Package	Q-Level
SS2P4		High Current Density Surface Mount Schottky Barrier Rectifier	If=2A Vf=0.5V Vrrm=40V	'DO-220AA (SMP)	

Smoke Detector - Parts

CONNECTIVITY - ETHERNET

MLCC

Product Name	Status	Description	Features	Package	Q-Level
VJ....31X RoHS Automotive MLCC		Surface Mount Multilayer Ceramic Chip Capacitors for Automotive Applications	120pF...1uF 16V...1000V	0402 to 1812	

MOSFET

Product Name	Status	Description	Features	Package	Q-Level
SI7308DN		N-Channel 60V (D-S) MOSFET	Rdson=58mOhm	Power PAK 1212-8	

RESISTOR

Product Name	Status	Description	Features	Package	Q-Level
TNPW		High Stability Thin Film Flat Chip Resistors	4.7Ohm...3MOhm	0402...1210	

SCHOTTKY DIODE

Product Name	Status	Description	Features	Package	Q-Level
SS2P4		High Current Density Surface Mount Schottky Barrier Rectifier	If=2A Vf=0.5V Vrrm=40V	'DO-220AA (SMP)	