Resets and supervisors
Portfolio overview

Run your application with carefree supervision

Reset is a mandatory function to ensure proper wake-up of complex systems but also reboot in case of failing or frozen applications. With the democratization of microprocessing units, there is an ever-increasing need for resets and supervisors.

ST's portfolio includes:
- basic or multi-voltage resets
- single or dual pushbutton Smart Resets™
- more advanced supervisors with watchdog, early power-fail detection, battery switchover functions

APPLICATIONS

- Portable consumer devices
- Computers
- Video games
- Toys, electronic games
- Set-top boxes, Blu-ray players
- Fitness/wellness equipment
- White goods
- Home automation
- Metering
- Industrial equipment
- Point of sales
- Medical equipment
- Healthcare devices

KEY BENEFITS

- Software freeze recovery
- Power failure protection
- Increased end-product robustness
- Increased end-user perception of quality

Scan this QR-code to access documentation and application notes

VOLTAGE DETECTORS

Part number	Package	Output	Reset threshold (V)	Reset timeout delay (s)	Supply current (µA)	Operating temperature (°C)
STM1061	SOT23-3	Open drain, active low	1.6 to 5.5	n/a	0.9	-40 to 85
STM1831	SOT23-5	Open drain, active low	1.6 to 5.7	adjustable	0.8	-40 to 85

SMART RESETS

Part number	Package	Manual pushbuttons	Reset pulse width (ms)	Reset setup delay (s)	Other	Operating temperature (°C)
STM6519	DFN6	1	1.28 to 360	0.5 to 10	Test mode	-40 to 85
STM6524	DFN6	2	1.28 to 360	0.5 to 10	Test mode	-40 to 85

WATCHDOGS

Part number	Package	Timeout period	Output type	Chip enable	Supply current (µA)	Operating temperature (°C)
STWD100	SOT23-5 SC70-5	3.4 ms 6.3 ms 102 ms 1.6 s	Open drain or push pull	Yes	13	-40 to 85

Note : Automotive grade availability on request

SUPERVISORS

Part number	Package	Output	Watchdog input	Watchdog output	Manual reset input	Power fail in/ out	Battery switch over	Chip enable gating	Battery freshness seal	Vcc switch output
STM6321	SOT23-5	Push pull, active high Open drain, active low	X							
STM6822	SOT23-5	Open drain, active low	X		X					
STM706	SO8	Push pull, active low	X	X	X	X				
STM795	SO8	Open drain, active low					X	X		X
STM819	SO8	Push pull, active low			X	X	X		X	

RESETS

Part number	Package	Monitored voltages	Output	Reset pulse width (ms)	Manual reset input	Delayed manual reset input	Reset 1 threshold (V)	Reset 2 threshold (V)	Reset 3 threshold (V)	Reset 4 threshold (V)	Reset 5 threshold (V)
STM6315	SOT143	1	Open drain, active low	1.5 to 1680	Yes		2.63 to 4.63				
STM809	SOT23-3	1	Push pull, active low	210			2.63 to 4.63				
STM6779	SOT23-6	2	Open drain, active low	210		Yes	1.58 to 4.63	Adjustable			
STM6710	SOT23-6	4	Open drain, active low	200	Optional		5, adjustable	3.3	1.8 to 2.5	1.8, adjustable	
STM6904	TSSOP8	4	Open drain, active low	210, 420	Yes		2.87 to 3.08	1.05 to 2.33	Adjustable	Adjustable	
STM6905	TSSOP8	5	Open drain, active low	210	Yes		2.87 to 3.08	1.05 to 2.33	Adjustable	Adjustable	Adjustable