




# MC33FS6600M0ES (Active)

Safety power management IC, QFN56

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Package [HVQFN56](#) plastic thermal enhanced very thin quad flat package; no leads; step-cut wettable flank, 56 terminals; 0.5 mm pitch, 8 mm x 8 mm x 0.85 mm body



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## Buy Options

MC33FS6600M0ES

935377745557

Active

TRAY-Tray, Bakeable, Multiple in Drypack

Min. Package Quantity: 260

1K @ US



Available Distributors: MC33FS6600M0ES



MC33FS6600M0ESR2

935377745528

Active

REEL-Reel 13" Q2/T3 in Drypack

Min. Package Quantity: 4000

1K @ US



Available Distributors: MC33FS6600M0ESR2



## Operating Characteristics

Parameter	Value
Supply voltage [min] (V)	-0.3
Supply voltage [max] (V)	60
Supply Voltage [Typ] (V)	12
Output Current (A)	15
Regulators-Buck Switching	1 HV buck output 3.3V to 5V, 1 LV buck output 1V to 3.3V, 2 LV bucks output 0.8V to 1.8V
Regulators-Boost Switching	1 LV boost output 5V to 5.74V
Ambient Operating Temperature (Min to Max) (°C)	125 to -40

Parameter	Value
Safety level	up to ASIL-D

Parameter	Value
Device Function	SMPS,linear regulators,safety power supply
Interface and Input Control	SPI / SPI
Additional Features - Analog	Analog MUX,Diagnostics Reporting,Temp,VDDIO,Vboost,Vbos,Vbuckx,Vldos,Vpre,Vsup,Vwakex and internal supplies,Wake up capabilities
Additional Features - Security	1x Fail-safe output,4 additional UV/OV inputs,Vcore UV/OV monitorings,Vddio UV/OV monitorings,challenger Watchdog
Protection	current limit,overtemperature,overvoltage,undervoltage
Supply Voltage [Min to Max] (V)	60.0 to -0.3
Sample Exception Availability	Y

## Environmental Information

Material Declaration	Pb-Free	EU RoHS	Halogen Free	RHF Indicator	REACH SVHC	Weight (mg)
MC33FS6600M0ES(935377745557)	Yes	Yes	Yes	D	<a href="#">REACH SVHC</a>	191.4
MC33FS6600M0ESR2(935377745528)	Yes	Yes	Yes	D	<a href="#">REACH SVHC</a>	191.4

## Quality Information

Material Declaration	Safe Assure Functional Safety	Moisture Sensitivity Level (MSL)	Peak Package Body Temperature (PPT) (C°)	Maximum Time at Peak Temperatures (s)
		Lead Free Soldering	Lead Free Soldering	Lead Free Soldering
MC33FS6600M0ES (935377745557)	ISO 26262	3	260	40
MC33FS6600M0ESR2 (935377745528)	ISO 26262	3	260	40

## Shipping Information

Part Number	Harmonized Tariff (US) <a href="#">Disclaimer</a>	Export Control Classification Number (US)
MC33FS6600M0ES (935377745557)	854239	EAR99
MC33FS6600M0ESR2 (935377745528)	854239	EAR99

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