



Product Numbering Information



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Part Numbering – 8-bit MCUs

<u>S</u> <u>S</u>	<u>9</u> <u>9</u>	<u>S08</u> <u>S08</u>	<u>SL</u> <u>DZ</u>	<u>16</u> <u>128</u>	<u>F</u> <u>F</u>	<u>1</u> <u>2</u>	<u>C</u> <u>C</u>	<u>TJ</u> <u>LF</u>	<u>R</u>
Qualification Status <ul style="list-style-type: none"> PC=Engineering Samples S=Automotive Qualified MC=General Market Qualified SC=Custom Build 	Memory Type <ul style="list-style-type: none"> 9=Flash 3=ROM (if available) 	Core	Device Family	Flash Size	Manufacturing Site	Production Revision	Temperature Options <ul style="list-style-type: none"> C=-40 °C to +85 °C V=-40 °C to +105 °C M=-40 °C to +125 °C J=-40 °C to +140 °C W=-40 °C to +150 °C 	Package Option	Shipping Method <ul style="list-style-type: none"> Blank=Tray R=Tape and Reel

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Part Numbering—8-bit S08, RS08 and 32-bit ColdFire V1 MCUs (Controller Continuum)

<u>MC</u>	<u>9</u>	<u>S08</u>	<u>QE</u>	<u>128</u>	<u>X</u>	<u>XX</u>			<u>R</u>
Qualification Status <ul style="list-style-type: none"> PC=Engineering Samples MC=Full Spec Qualified Product S=Automotive (more details on request) 	Memory Type <ul style="list-style-type: none"> 9=S08 Flash Blank=V1 Flash 3=Rom 	Core <ul style="list-style-type: none"> S08=S08 RS08=Reduced S08 F51=ColdFire V1 (32-bit) 	Family (e.g. QE, SH)	Memory Size (approx.)	Temperature Range <ul style="list-style-type: none"> C=-40 °C to +85 °C V=-40 °C to +105 °C M=-40 °C to +125 °C 	Package Code			Tape and Reel Status <ul style="list-style-type: none"> R=Tape and Reel Blank=Trays
						6-pin DFN	(FP)	DB	
						8-pin QFN	(FQE)	FC	
						8-pin PDIP	(PAE)	PC	
						8-pin NB SOIC	(DNE)	SC	
						16-pin TSSOP	(DTE)	TG	
						16-pin QFN	(FFE)	FG	
						16-pin SOIC	(DWE/DXE)	WG	
						16-pin PDIP	(PE)	PG	
						20-pin SOIC	(DYE)	WJ	
						20-pin TSSOP	(DSE)	TJ	
						20-pin PDIP	(PE)	PJ	
						24-pin QFN	(FKE)	FK/GK	
						28-pin SOIC	(DZE)	WL	
						28-pin TSSOP	(DRE)	TL	
						28-pin PDIP	(PE)	PL	
						32-pin LQFP	(FJE)	LC	
						32-pin QFN	(FCE)	FM/GM	
						44-pin QFP	(FBE)	QD	
						44-pin LQFP	(FGE)	LD	
48-pin LQFP	(FAE)	LF							
48-pin QFN	(FDE)	FT/GT							
64-pin LQFP	(PUE)	LH							
64-pin QFP	(FUE)	QH							
64-pin QFN	(AFE)	FX/GX							
80-pin LQFP	(LKE)	LK							
100-pin LQFP	(PUE)	LL							
*New PNs valid for all new (R)S08 except AC family									



Part Numbering – 16-bit MCUs

<u>S</u> <u>S</u>	<u>9</u> <u>9</u>	<u>S12</u> <u>12X</u>	<u>HC</u> <u>EG</u>	<u>256</u> <u>128</u>	<u>J</u> <u>J</u>	<u>3</u> <u>2</u>	<u>C</u> <u>C</u>	<u>AL</u> <u>AA</u>	<u>R</u>
Qualification Status <ul style="list-style-type: none"> PC=Engineering Samples S=Automotive Qualified MC=General Market Qualified SC=Custom Build 	Memory Type <ul style="list-style-type: none"> 9=Flash 3=ROM (if available) 	Core ("S" not used in S12XE, S12XH and S12XD families because of character limitations)	Device Family	Flash Size	Manufacturing Site	Production Revision	Temperature Options <ul style="list-style-type: none"> C=-40 °C to +85 °C V=-40 °C to +105 °C M=-40 °C to +125 °C J=-40 °C to +140 °C 	Package Option	Shipping Method <ul style="list-style-type: none"> Blank=Tray R=Tape and Reel

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Part Numbering – Digital Signal Controllers

<u>MC</u>	<u>56</u>	<u>F</u>	<u>84</u>	<u>7</u>	<u>4</u>	<u>9</u>	<u>V</u>	<u>LH</u>	<u>R</u>
Qualification Status <ul style="list-style-type: none"> PC=Engineering Samples MC=Full Spec Qualified Product 	Architecture <ul style="list-style-type: none"> 56=56800E and 56800EX Core 	Memory <ul style="list-style-type: none"> F=Flash 	Device Family	Maximum CPU Frequency <ul style="list-style-type: none"> 3=50 MHz 4=60 MHz 5=80 MHz 7=100 MHz 	Program Flash Memory Size <ul style="list-style-type: none"> 1=16 KB 2=32 KB 3=48 KB 4=64 KB 5=96 KB 6=128 KB 8=256 KB 	Feature Set	Temperature Options <ul style="list-style-type: none"> C=-40 °C to +85 °C V=-40 °C to +105 °C M=-40 °C 	Package Option	Shipping Method <ul style="list-style-type: none"> Blank=Tray R=Tape and Reel



Part Numbering – Kinetis K Series MCUs

Q	K##	FD	FFF	R	T	PP	CCC	N
Qualification Status <ul style="list-style-type: none"> M=Production P=Unqualified sample 	Kinetis Family <ul style="list-style-type: none"> K1X K2X K3X K4X K5X K6X K7X 	Flash Memory Type <ul style="list-style-type: none"> N=Non-Flex Memory X=Flex Memory Core Type <ul style="list-style-type: none"> D=ARM Cortex-M4 + DSP F=ARM® Cortex™-M4 + DSP +FPU 	Program Flash Memory Size <ul style="list-style-type: none"> 16=16 KB 32=32 KB 64=64 KB 96=96 KB 128=128 KB 256=256 KB 512=512 KB 1M0=1 MB 1M5=1.5 MB 2M0=2 MB 2M5=2.5 MB <p>*There will be more memory size available</p>	Silicon Revision <ul style="list-style-type: none"> Z=Initial Rev =2nd Rev A=3rd Rev B=4th Rev 	Temperature Range <ul style="list-style-type: none"> Blank=0 °C to 70 °C V=-40 °C to +105 °C C=-40 °C to +85 °C 	Package Identifier <ul style="list-style-type: none"> FM=32 QFN (5 mm x 5 mm) FT=48 QFN (7 mm x 7 mm) LF=48 LQFP (7 mm x 7 mm) MP=64 MAPBGA (5 mm x 5 mm) LH=64 LQFP (10 mm x 10 mm) LK=80 LQFP (12 mm x 12 mm) MB=81MAPBGA (8 mm x 8 mm) LL=100 LQFP (14 mm x 14 mm) ML=104 MAPBGA (14 mm x 14 mm) AB=120 WLCSP (5.3 mm x 5.3 mm) MC=121 MAPBGA (8 mm x 8 mm) AA=143 WLCSP (6.4 mm x 5.6 mm) LQ=144 LQFP (20 mm x 20 mm) MD=144 MAPBGA (13 mm x 13 mm) MJ=256 MAPBGA (17 mm x 17 mm) 	Maximum CPU Frequency <ul style="list-style-type: none"> 5=50 MHz 7=72 MHz 10=100 MHz 12=120 MHz 15=150 MHz 	Packaging Type <ul style="list-style-type: none"> R=Tape and Reel Blank=Trays

Part Numbering – Kinetis L Series Family

<u>Q</u>	<u>K##</u>	<u>Z</u>	<u>FFF</u>	<u>R</u>	<u>T</u>	<u>PP</u>	<u>CCC</u>	<u>N</u>
Qualification Status <ul style="list-style-type: none"> M=Production P=Unqualified Sample 	Kinetis Family <ul style="list-style-type: none"> KL0X KL1X KL2X KL3X KL4X 	Core Type <ul style="list-style-type: none"> Z=ARM Cortex™-M0+ 	Program Flash Memory Size <ul style="list-style-type: none"> 16=16 KB 32=32 KB 64=64 KB 96=96 KB 128=128 KB 256=256 KB 	Silicon Revision <ul style="list-style-type: none"> Z=Initial Rev =2nd Rev A=3rd Rev B=4th Rev 	Temperature Range <ul style="list-style-type: none"> Blank= 0°C to 70°C V=-40 °C to +105 °C C=-40 °C to +85 °C 	Package Identifier <ul style="list-style-type: none"> FG=16 QFN (3 mm x 3 mm) AF=20 WLCSP (2 mm x 2 mm) FK=24 QFN (4 mm x 4 mm) AC=25 WLCSP (2 mm x 2 mm) FM=32 QFN (5 mm x 5 mm) FC=32 LQFP (7 mm x 7 mm) AD=35 WLCSP (2 mm x 3 mm) FT=48 QFN (7 mm x 7 mm) LF=48 LQFP (7 mm x 7 mm) MP=64 MAPBGA (5 mm x 5 mm) LH=64 LQFP (10 mm x 10 mm) LK=80 LQFP (12 mm x 12 mm) LL=100 LQFP (14 mm x 14 mm) MC=121 MAPBGA (8 mm x 8 mm) 	Maximum CPU Frequency <ul style="list-style-type: none"> 4=48 MHz 	Packaging Type <ul style="list-style-type: none"> R=Tape and Reel Blank=Trays



Part Numbering – Qorivva MPC55xx MCUs

<u>M</u> <u>S</u>	<u>PC</u> <u>PC</u>	<u>5554</u> <u>5514E</u>	<u>A</u>	<u>M</u> <u>C</u>	<u>VR</u> <u>LQ</u>	<u>132</u> <u>48</u>	<u>R</u>
Qualification Status <ul style="list-style-type: none"> P=Engineering Samples S=Automotive Qualified M=General Market Qualified 	Power Architecture® Core	Product Name	Reserved/Optional Field	Temperature Options <ul style="list-style-type: none"> A=-55 °C to +125 °C C=-40 °C to +85 °C V=-40 °C to +105 °C M=-40 °C to +125 °C 	Package Option	Bus Speed	Shipping Method <ul style="list-style-type: none"> Blank=Tray R=Tape and Reel

Part Numbering – Qorivva MPC56xx MCUs

<u>P</u> <u>S</u>	<u>PC</u> <u>PC</u>	<u>5604B</u> <u>5604S</u>	<u>E</u> <u>E</u>	<u>M</u> <u>M</u>	<u>LL</u> <u>LL</u>	<u>R</u>
Qualification Status <ul style="list-style-type: none"> P=Engineering Samples S=Automotive Qualified M=General Market Qualified 	Power Architecture Core	Product Name	Reserved/Optional Field	Temperature Options <ul style="list-style-type: none"> C=-40 °C to +85 °C V=-40 °C to +105 °C M=-40 °C to +125 °C 	Package Option	Shipping Method <ul style="list-style-type: none"> Blank=Tray R=Tape and Reel

Part Numbering – PX Series MCUs

<u>MPX</u>	<u>R</u>	<u>40</u>	<u>40</u>	<u>V</u>	<u>VU</u>	<u>264</u>	<u>R</u>
MC Qualification Status <ul style="list-style-type: none"> M=Full Spec Qualified S=Mask Spec Qualified P=Engineering Samples PX=Brand	Family <ul style="list-style-type: none"> S=Safety D=Display Graphics N=Connectivity/Network R=Performance/Real-Time Control 	Class: Indication of Integration Level <ul style="list-style-type: none"> 10 20 21 30 40 	Flash Memory Size <ul style="list-style-type: none"> 02=256 KB 05=512 KB 10=1 MB 15=1.5 MB 20=2 MB 30=3 MB 40=4 MB 	Temperature <ul style="list-style-type: none"> V=-40 °C to +105 °C 	Package <ul style="list-style-type: none"> LQ=144 LQFP (20 mm x 20 mm) LU=176 LQFP (24 mm x 24 mm) LT=208 LQFP (28 mm x 28 mm) MG=208 MAPBGA (17 mm x 17 mm) MM=257 MAPBGA (17 mm x 17 mm) VU=416 PBGA (27 mm x 27 mm) MS=473 MAPBGA (19 mm x 19 mm) 	Speed/Frequency <ul style="list-style-type: none"> 64=64 MHz 80=80 MHz 116=116 MHz 120=120 MHz 125=125 MHz 150=150 MHz 180=180 MHz 264=264 MHz 	Tape and Reel <ul style="list-style-type: none"> R=Tape and Reel

Part Numbering – ColdFire MCUs and Processors

<u>M</u>	<u>CF52</u>	<u>259</u>	<u>C</u>	<u>AG</u>	<u>80</u>	<u>R</u>
Qualification Status <ul style="list-style-type: none"> PC=Engineering Samples MC=Full Spec Qualified Product 	ColdFire Core <ul style="list-style-type: none"> 54=V4 53=V3 52=V2 51=V1 	Family/ Derivative	Temperature Range <ul style="list-style-type: none"> Blank=0 °C to 70 °C C=-40 °C to +85 °C V=-40 °C to +105 °C M=-40 °C to +125 °C 	Package Code <ul style="list-style-type: none"> AE=64 LQFP AF=100 LQFP AL=112 LQFP AG=144 LQFP EP=64 QFN VM=81 MAPBGA VN=144 MAPBGA 	Core Speed Optional <ul style="list-style-type: none"> 66 MHz 80 MHz 	Tape and Reel Status <ul style="list-style-type: none"> R=Tape and Reel Blank=Trays

Part Numbering – ColdFire V1 MCUs

<u>Q</u>	<u>CCCC</u>	<u>DD</u>	<u>MMM</u>	<u>T</u>	<u>PP</u>
Qualification Status <ul style="list-style-type: none"> M=Fully Qualified, General Market Flow P=Prequalification 	Core Code <ul style="list-style-type: none"> F51=ColdFire V1 	Device Number <ul style="list-style-type: none"> JF JU QM QU JM JE JG QE QW MM CN 	Memory Size <ul style="list-style-type: none"> 32=32 KB 64=64 KB 128=128 KB 256=256 KB 	Temperature Range, Ambient <ul style="list-style-type: none"> V=-40 °C to +105 °C C=-40 °C to +85 °C 	Package Identifier <ul style="list-style-type: none"> FM=32 QFN (5 mm x 5 mm) LH=64 LQFP (10 mm x 10 mm) HS=44 LGA (5 mm x 5 mm) LF=48 LQFP (7 mm x 7 mm) LK=80 LQFP (12 mm x 12 mm) LL=100 LQFP (14 mm x 14 mm) MB=81 MAPBGA (10 mm x 10 mm) ML=104 MAPBGA (10 mm x 10 mm)

Part Numbering—i.MX233, i.MX25, i.MX28 and i.MX35 Applications Processors

<u>MC</u>	<u>IMX353</u>	<u>(D)</u>	<u>JM</u>	<u>5</u>	<u>C</u>	<u>R2</u>
Qualification Status <ul style="list-style-type: none"> PC=Engineering Samples MC=Full Spec Qualified Product 	Core (i.MX) <ul style="list-style-type: none"> Device Type 	Temperature <ul style="list-style-type: none"> Blank Commercial: 0 °C to 70 °C D Commercial: -20 °C to +70 °C C Extended: -40 °C to +85 °C A Auto: -40 °C to +85 °C 	Package Code <ul style="list-style-type: none"> VK=TMAP, .5 mm pitch JM/VM=MAPBGA, .8 mm pitch AG 128 LQFP 	CPU Speed <ul style="list-style-type: none"> 2=266 MHz 4=400 MHz 5=532 MHz 	<ul style="list-style-type: none"> This is the Rev Indicator 	Tape and Reel Status <ul style="list-style-type: none"> R2=Tape and Reel Blank=Trays

Part Numbering—i.MX50 Applications Processors

<u>M</u>	<u>IMX5x</u>	<u>(D)</u>	<u>VV</u>	<u>5</u>	<u>C</u>	<u>R</u>	<u>Package</u>	
Qualification Status <ul style="list-style-type: none"> PC=Engineering Samples MC=Full Spec Qualified Product 	Core (i.MX) <ul style="list-style-type: none"> Device type 	Temperature <ul style="list-style-type: none"> Blank Commercial: 0 °C to 70 °C D Commercial: -20 °C to +70 °C C Extended: -40 °C to +85 °C A Auto: -40 °C to +85 °C 	Package Code <ul style="list-style-type: none"> VK=MAPBGA, .5 mm pitch VM=MAPBGA, .8 mm pitch ZK=PoP, .5 mm pitch 	CPU Speed <ul style="list-style-type: none"> 8=800 MHz 	<ul style="list-style-type: none"> This is the rev indicator 	Tape and Reel Status <ul style="list-style-type: none"> R=Tape and Reel Blank=Trays 	Package Type	ROHS
							13 mm MBGA .5 mm pitch	VK
							17 mm MBGA .5 mm pitch	VM
							13 mm PoP .5 mm pitch	ZK



Part Numbering – i.MX51 and i.MX53 Applications Processors

<u>MC</u>	<u>IMX5x</u>	<u>(D)</u>	<u>VV</u>	<u>5</u>	<u>C</u>	<u>R2</u>
Qualification Status <ul style="list-style-type: none">• PC=Engineering Samples• MC=Full Spec Qualified Product	Core (i.MX) <ul style="list-style-type: none">• Device Type	Temperature <ul style="list-style-type: none">• Blank Commercial: 0 °C to 70 °C• D Commercial: -20 °C to +70 °C• C Extended: -40 °C to +85 °C• A Auto: -40 °C to +85 °C	Package Code <ul style="list-style-type: none">• VK=MAPBGA, .5 mm pitch• JM=MAPBGA, .8 mm pitch• VV=TE-PBGA, .8 mm pitch	CPU Speed <ul style="list-style-type: none">• 6=600 MHz• 8=800 MHz• 1=1.0 GHz• 2=1.2 GHz	<ul style="list-style-type: none">• This is the Rev Indicator	Tape and Reel Status <ul style="list-style-type: none">• R2=Tape and Reel• Blank=Trays

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Part Numbering – i.MX 6 Series Applications Processors

<u>MC</u>	<u>IMX6</u>	<u>@</u>	<u>+</u>	<u>VV</u>	<u>\$\$</u>	<u>%</u>	<u>A</u>
Qualification Level <ul style="list-style-type: none"> PC=Samples MC=Mass SC=Special 	Part Number Series <ul style="list-style-type: none"> IMX6Q=i.MX 6Quad IMX6D=i.MX 6Dual IMX6U=i.MX 6DualLite IMX6S=i.MX 6Solo IMX6L=i.MX 6SoloLite 	Part Differentiator <ul style="list-style-type: none"> 8=Consumer w/ VPU, GPU, EPD No CAN/MLB 7=Industrial w/ VPU, GPU, No EPD 6=Auto w/VPU, GPU, No EPD 5=Consumer, w/ VPU, GPU, No EPD, No CAN/MLB 4=Auto w/GPU, No VPU, No EPD 1=Auto, No VPU, No GPU, No EPD 	Temperature Tj <ul style="list-style-type: none"> D=Consumer: 0 °C to 95 °C E=Extended Cons: -20 °C to +105 °C E=Extended Cons: -40 °C to +105 °C 6SoloLite only) C=Industrial: -40 °C to +105 °C A=Auto: -40 °C to +125 °C 	Package Type <ul style="list-style-type: none"> VT=FCBGA, 21 mm x 21 0.8 mm (lidded) YM=FCBGA, 21 mm x 21 0.8 mm (not lidded) VM=MAPBGA, 21 mm x 21 0.8 mm VN=MAPBGA, 13 mm x 13 0.5 mm ZT=PoP, 13 mm x 13 0.5 mm 	Frequency <ul style="list-style-type: none"> 08=800 MHz 10=1 GHz 12=1.2 GHz 	Fusing <ul style="list-style-type: none"> C=HDCP Enabled (i.MX 6Quad, 6Dual, 6DualLite, 6Solo) 	Silicon Rev <ul style="list-style-type: none"> A=Rev 1.0 B=Rev 1.1 C=Rev 1.2

*codecs=Sorenson, DivX3, RealN

Part Numbering – QorIQ Communications Platforms

<u>P</u>	<u>4</u>	<u>08</u>	<u>0</u>	<u>N</u>	<u>S</u>	<u>E</u>	<u>1</u>	<u>P</u>				<u>H</u>	<u>A–Z</u>	<u>A</u>
Generation <ul style="list-style-type: none"> P=45 nm T=28 nm 	Platform <ul style="list-style-type: none"> 1–5 	No. of Cores <ul style="list-style-type: none"> 01, 02, 04, 08, 16, 24 	Derivative <ul style="list-style-type: none"> 0–9 (std) A, B (spec) 	Qualification Status <ul style="list-style-type: none"> P=Prototype C=Qual'd to Comm'l Tier N=Qual'd to iNdustr'l Tier S=Special qualified L=specialL prototype 	Temperature Range <ul style="list-style-type: none"> S=Standard Temp X=External Temp 	Encryption <ul style="list-style-type: none"> E=SEC Present N=Not Present 	Package <ul style="list-style-type: none"> 1=FCPBGA PB Free 2=TEPBGA2 PB Free 5=TEPBGA-1 PB Free 	A	Omit	N	1300 or 1333		Option Codes Each letter is a unique option enabled if present in the P/N. Up to four available.	Die Revision <ul style="list-style-type: none"> A=1st mask B=2nd mask C=3rd mask
								B	400	O	Omit			
								C	500	P	1400 or 1500			
								D	533	Q	1600/1666			
								E	600	R	TBD			
								F	667	S	Omit			
								G	Omit	T	1800			
								H	800	V	2000			
								I	Omit	Y	Omit			
								J	Omit	Z	Omit			
								K	1000	1	Omit			
								L	1067	2	2200			
								M	1200	3–9	More Expandability			
								Omit=Frequency Not Defined						

Part Numbering – QorIQ Qonverge PSC9131 Series

<u>BSC9131</u>	<u>N</u>	<u>S</u>	<u>E</u>	<u>1</u>	<u>K</u>	<u>H</u>	<u>K</u>	<u>A</u>
Series <ul style="list-style-type: none"> BSC9131 =General 	Qualification Status <ul style="list-style-type: none"> P=Prototype (No Qual) C=Comm'l Tier Qual N=Industr'l Tier Qual 	Temperature Range <ul style="list-style-type: none"> S=Std. Temp X=Ext. Temp 	Encryption <ul style="list-style-type: none"> E=SEC Present 	Package <ul style="list-style-type: none"> 1=FCPBGA PB Free 	CPU Frequency <ul style="list-style-type: none"> H=800 MHz K=1000 MHz 	DDR Frequency <ul style="list-style-type: none"> H=800 MHz 	DSP Frequency <ul style="list-style-type: none"> H=800 MHz K=1000 MHz 	Mask Version <ul style="list-style-type: none"> A=Rev 1.0 B=Rev 1.1

Part Numbering – PowerQUICC (8x5x) Communications Processors

MSC PC	8x5x	[blank] S T	VT	1000 800	B
Qualification Status PC=Engineering Samples MSC=General Market Qualified	Product Family 8 x 56: Six cores 8 x 54: Four cores 8 x 52: Two cores 8 x 51: One core	Temperature Options [blank]=0 °C to 90 °C S=0 °C to 105 °C T=-40 °C to +105 °C	Lead-Free Spheres	Core Speed 1000 MHz 800 MHz	Die Revision B=Rev 2.1

Part Numbering – PowerQUICC II Pro (83xx) and PowerQUICC III (85xx) Communications Processors

M	PC	8313	E	C	VR	AFF	QUICC Engine Frequency	B
Qualification Status <ul style="list-style-type: none"> P=Engineering Samples M=Full Spec Qualified Product 	Core <ul style="list-style-type: none"> PC=Power Architecture 	Family <ul style="list-style-type: none"> 83xx, 85xx 	Encryption Acceleration <ul style="list-style-type: none"> Blank=Not Included E=Included 	Temperature Range <ul style="list-style-type: none"> A=0 °C to 90 °C Blank=0 °C to 105 °C C=-40 °C Ta to +105 °C Tj 	Package Code <ul style="list-style-type: none"> VR=PB Free 516/620/689 TEPBGA ZQ=Leaded 516/668 TEPGA, 473 MAPBGA ZU=Leaded 740 TBGA VV=PB Free 740 TBGA VT=PB Free 783 FCPBGA PX=Leaded 783 FCPBGA VM=PB Free 369/473/489 MAPBGA 	CPU/DDR Speed <ul style="list-style-type: none"> ABD=133/266 MHz ACD= 200/266 MHz ADD=266/266 MHz AFF=333/333 MHz AGD=400/266 MHz AFD=333/266 MHz ANG=800/400 MHz ALG=667/400 MHz AJD=533/266 MHz ALF=667/333 MHz AQG=1000/400 MHz AUL=1333/533 MHz AVL=1500/533 MHz APF=833/333 MHz AQF=1000/333 MHz AUJ=1333/533 MHz ANK=800/600/400 MHz AUN=1333/800 MHz AQL=1067/667 MHz 	<ul style="list-style-type: none"> C=200/233 MHz D=266 MHz E=300 MHz G=400 MHz H=500 MHz J=533 MHz 	Die Revision <ul style="list-style-type: none"> A=1st Mask B=2nd Mask C=3rd Mask

Freescale may not offer all combinations of features/functions shown in this decoder.

Please use the freescale.com "Orderable Part" search function to determine if a particular part number is available.



Legacy Part Numbering – Power Management Devices

<u>MC</u>	<u>xxxxx</u>	<u>r</u>	<u>v</u>	<u>PPP or PP</u>	<u>RR</u>
Product Category <ul style="list-style-type: none">• MC=Qualified Standard Device• SC=Custom Device• PC=Prototype Device	Core/Target	Revision (Default Blank)	Variation (Default Blank)	Package Designator	Tape and Reel Indicator

New Part Numbering – Power Management Devices

<u>MM</u>	<u>ff</u>	<u>xxxx</u>	<u>yy</u>	<u>r</u>	<u>v</u>	<u>PP</u>	<u>RR</u>
Product Category <ul style="list-style-type: none">• MM=Qualified Standard Device• SM=Custom Device• PM=Prototype Device	Family <ul style="list-style-type: none">• PF=PF Series	Core/Target	Program Configuration	Revision (Default Blank)	Variation (Default Blank)	Package Designator	Tape and Reel Indicator

Part Numbering – RF Power Transistors

M	RF	6	VP	2	600	H	R5
Device Status M=Production P=Prototype	Design Characteristics RF=Radio Frequency E=Enhanced Ruggedness HV=High Voltage W=Wideband MG=Monolithic GaAs D=Dual Path	Generation of LDMOS 6=6th 7=7th 8=8th 9=9th 1500=Land Mobile 3000=TV Broadcast	Device Type H=High-Performance In-Package Doherty IC=Integrated Circuit V=Very High Voltage M=Medium Voltage L=Low Voltage S=Single Ended P=Push Pull G=GaAs	Frequency Band 38=3800 MHz 35=3500 MHz 27=2700 MHz 24=2400 MHz 21=2200 MHz 20=2000 MHz 19=1900 MHz 18=1800 MHz 9=900 MHz 4=400 MHz 2=220 MHz	P1dB Output Power Capability 010=10 W 100=100 W 1K=1 kW 1K25=1.25 kW	Package W=Enhanced Video Bandwidth H=Low Rth and Low Gold N=Earless Plastic G=Gull Wing Surface Mount B=Bolt Down Plastic S=Earless	Tape and Reel Size T1=500 or 1000 R1=500 R2=1500 R3=250 R4=100 R5=50 R6=150

Part Numbering – RF GaAs MMICs

M	ML	09	21	1	H	T1
Device Status M=Production P=Pre-Production	Product Type A/Z=Amplifier L=Low Noise V=Variable Gain G=Gain Block M=MMIC T=Attenuators S=Switch X=Mixer	Center Frequency of Operation 25=2500 MHz 15=1500 MHz 09=900 MHz 04=400 MHz	Output Power Capability 33 dBm 31 dBm 30 dBm 24 dBm 21 dBm	Number of Stages 1=One Stage 2=Two Stages	Technology B=HBT H=E-pHEMT	Tape and Reel Size T1=1000



Part Numbering – Xtrinsic Sensors

<u>F</u>	<u>X</u>	<u>T</u>	<u>C</u>	<u>XXXXXXXX</u>	<u>Q</u>	<u>XX</u>	<u>X</u>
Maturity Level <ul style="list-style-type: none"> F=Production P=Prototype S=Customer Special 	Xtrinsic	Sensor Configuration <ul style="list-style-type: none"> L=Linear Acceleration M=Magnetic P=Pressure T=Touch R=Radar O=Orientation->L+M Y=TPMS->P+ 	Core Type <ul style="list-style-type: none"> C=ColdFire H=8 1/2 bit MCU S=State Machine Q=DSP N=No Programmable Engine Blank=No Programmable Engine 	Product Numbers	Qualification Level <ul style="list-style-type: none"> A=Automotive I=Industrial C=Commercial 	Package Style	Tape and Reel

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Part Numbering – Automotive Acceleration Sensors

<u>MMA</u>	<u>12</u>	<u>60</u>	<u>EG</u>	<u>R2</u>
Micromachined Accelerometer	Number and Type of Axis <ul style="list-style-type: none"> • 12=Single Axis • 22=Single Axis X (up to 100g) • 23=Single Axis (>100g) • 32=Dual Axis XY (POLY SI) • 62=Dual Axis XY (HARMEMS) 	Random Number	EG=RoHS Compliance	Shipping Method <ul style="list-style-type: none"> • R2=Tape and Reel

Part Numbering – Consumer Acceleration Sensors

<u>MMA</u>	<u>726</u>	<u>0</u>	<u>Q</u>	<u>R2</u>
Micromachined Accelerometer	Number and Type of AXIS <ul style="list-style-type: none"> • 745=Tri Axis 2/4/8g XYZ • 736=Tri Axis 1.5/6g XYZ • 734=Tri Axis 3/11g XYZ • 733=Tri Axis 4/12g XYZ • 726=Tri Axis XYZ • 627=Dual Axis XY • 628=Dual Axis XZ • 626=Dual Axis 1.5g XY • 623=Dual Axis 10g XY 	Random Number	Package Code <ul style="list-style-type: none"> • Q=QFN • L=LGA 3 x 5 x 1 mm • L=LGA 3 x 5 x 0.8 mm 	Shipping Method <ul style="list-style-type: none"> • T=Tray (500 pcs) • R2=Tape and Reel

Part Numbering – Pressure Sensors

<u>M</u>	<u>PX</u>	<u>V</u>	<u>5</u>	<u>010</u>	<u>G</u>	<u>C</u>	<u>6</u>	<u>U</u>
Device Category <ul style="list-style-type: none"> M=Qualified Standard S=Custom Device P, X=Prototype Device 	Pressure Sensors	Package Selection <ul style="list-style-type: none"> -=Unibody A=Absolute Small Outline Package (SOP) C=Chip Pak H=Super Small Outline Package (SSOP) M=MPAK V=Vented Small Outline Package Y=CMOS Z=Media Resistant Gel 	Family <ul style="list-style-type: none"> -=Uncompensated 2=Temp Comp and Calibrated 4–6=Amplified 	Maximum Rated Pressure (kPa) Except MPX2300 Expressed in mmHg	Measurement Type <ul style="list-style-type: none"> A=Absolute D=Differential G=Gauge V=Vacuum 	Porting Option <ul style="list-style-type: none"> P=Side Port Porting DP=Differential Porting VP=Vacuum side Porting C, S=Axial port 	SOP Lead Bending <ul style="list-style-type: none"> 6=Gull Wing Leads 7=Leads 84° Bend Towards the Bottom 	Shipping Method <ul style="list-style-type: none"> -Trays T1=Tape and Reel U=Tube

Part Numbering – Touch Sensors

<u>M</u>	<u>PR</u>	<u>EE</u>	<u>V</u>	<u>PPP</u>	<u>RR</u>
Product Category <ul style="list-style-type: none"> M=Qualified Standard C=Custom Device P=Prototype Device 	Touch Sensor	Number of Electrodes	Version	Package Designator <ul style="list-style-type: none"> ED=RoHS Compliance 	Shipping Method <ul style="list-style-type: none"> Tape and Reel Indicator



Part Numbering – CodeWarrior

<u>CWA or CWP or CWT</u>	<u>Basic or Standard or Pro</u>	<u>NL or FL or R</u>
Suite Type <ul style="list-style-type: none">• CWA=Annual Subscription• CWP=Perpetual Licenses• CWT=Renewal for Perpetual Suite Tech Support	Suite Level <ul style="list-style-type: none">• BASIC=Basic Suite• STANDARD=Standard Suite• PRO=Professional Suite Suite Upgrade Part Numbers <ul style="list-style-type: none">• BAS2STD=Upgrade from Basic to Standard Suite• BAS2PRO=Upgrade from Basic to Professional Suite• STD2PRO=Upgrade from Standard to Professional Suite	Licensing Type <ul style="list-style-type: none">• NL=Node-Locked License• FL=Floating License• R=Renewal to Annual Subscription



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