



Serial EEPROM DFN5 package offer

June 2017

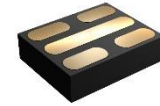


www.st.com/standardeeprom



Key applications - DFN5

STMicroelectronics offers I²C EEPROMs in **DFN5 package** to fit applications where **space constraints** and **manufacturing robustness** are key factors



DFN5 = UFDFPN5* = MLP5

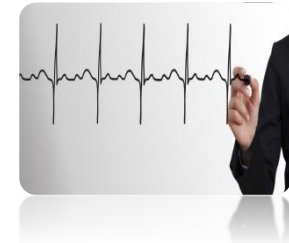
Modules



Headsets



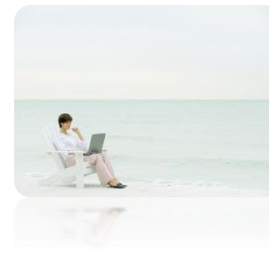
Portable medical devices



Drones



Wi-Fi and Bluetooth modules





DFN5 package advantages

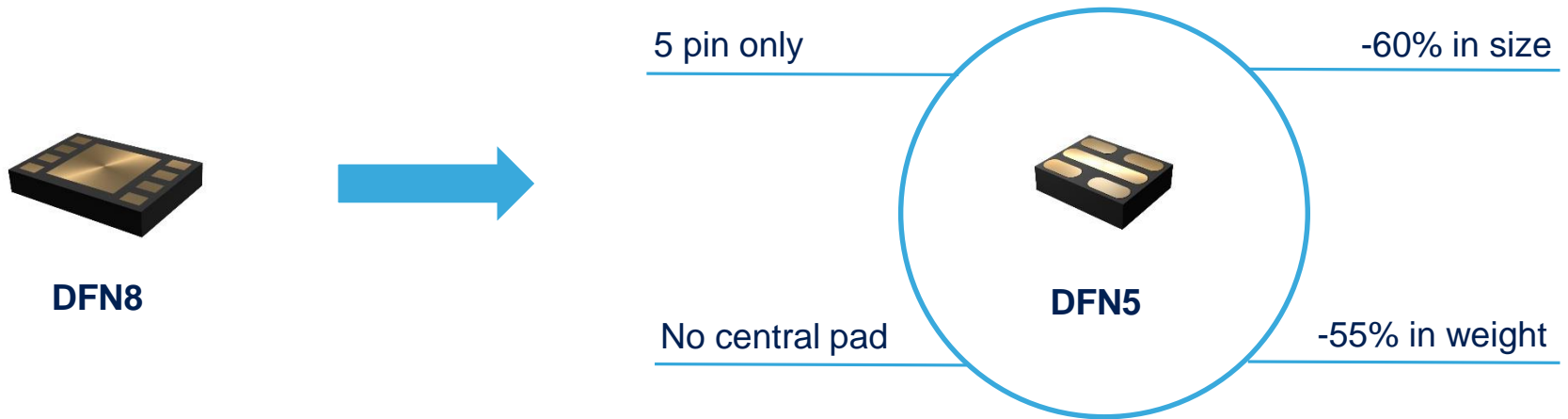
Features	Benefits
Complete I ² C portfolio Available in 2, 4, 8, 16, 32, 64 and 128 Kbits	Easy upgrade thanks to same footprint for all densities
Package size: 1.4 x 1.7 mm	Minimize EEPROM footprint on PCB
5 pin count only, no leads	Reduce soldering budget
Weight: 7 mg	Gain on application weight
Robust molded package	Easy handling and mounting
ECOPACK2®	RoHS-compliant and Halogen-free

Package information and soldering guidelines available
at www.st.com/standardeeprom



DFN8 versus DFN5 package

Switch from DFN8 to DFN5 package and benefit from **significant board space reduction** and cost improvements.

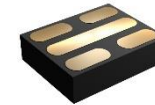


DFN8	DFN5	Advantages
2 x 3 mm	1.4 x 1.7 mm	Reduced footprint area (-60%)
8 pin	5 pin	Reduced pin count for easier routing
16 mg	7 mg	Reduced weight (-55%)
Central pad	No pad	Reduced soldering costs
0.55	0.55	Same thickness
Pitch 0.5	Pitch 0.4	Smaller pitch for PCB manufacturing



Conclusion

- Select an I²C EEPROM in DFN5 package when
 - PCB footprint must be reduced
 - Easy handling and manufacturing robustness are important
 - Thickness is not a key factor
- Switching from DFN8 to DFN5 brings
 - 60% gain in footprint area
 - 55% gain in weight
 - Gain in soldering spending
 - Improved cost solution
- ST offers a wide DFN5 portfolio for maximum design flexibility
 - Free samples available at www.st.com
 - Fast samples delivery with our E-distributors
 - Technical docs for DFN5 usage in Resources widget at www.st.com/standardeeprom



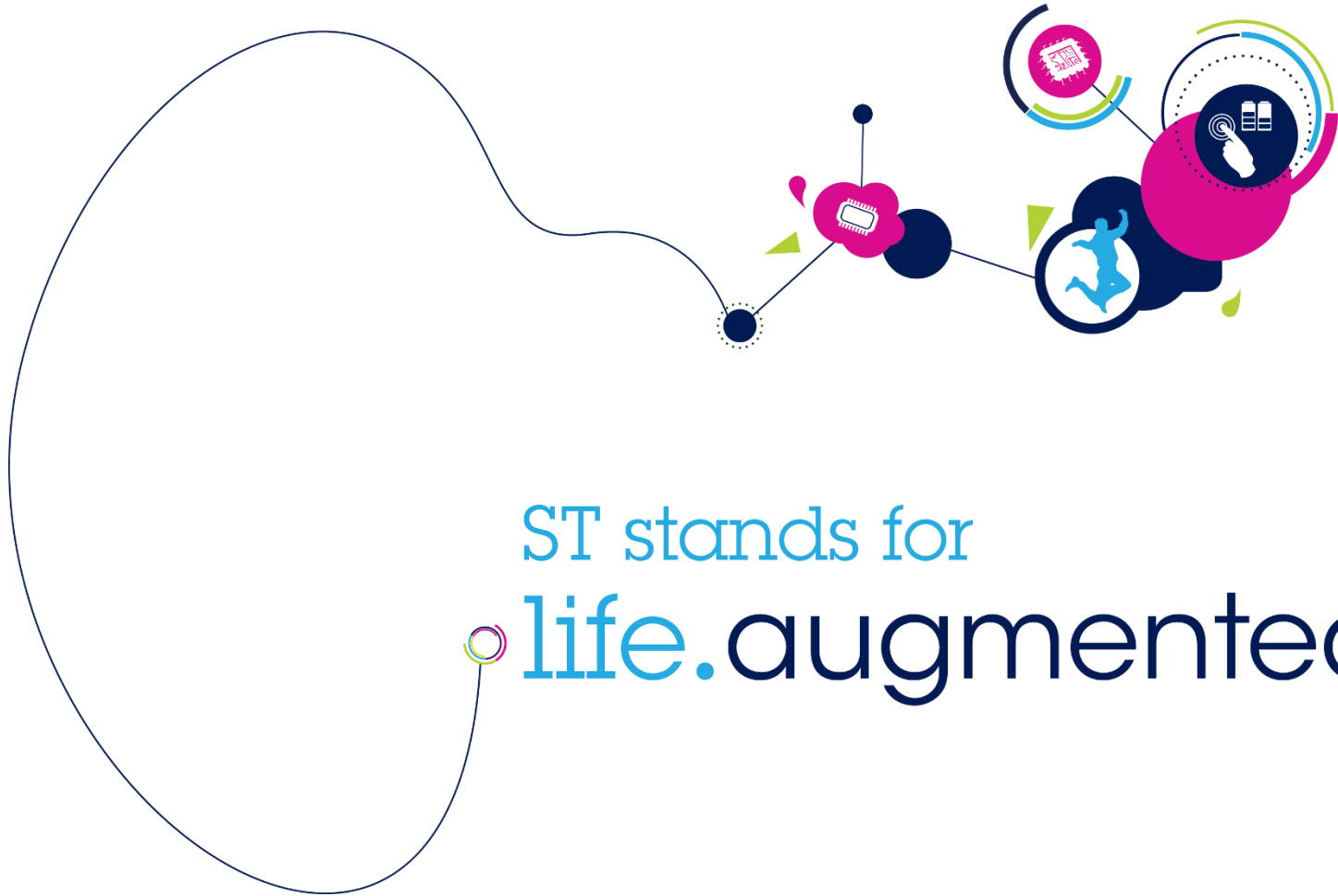
I²C EEPROM - DFN8 & DFN5 packages

Available products

Profile description	Part number	Memory density (Kbits)	Dimension (X/Y) (mm)		Profile (typ.) (mm)	Nb of pins
I²C bus						
DFN5 (UFD _{FPN5} – MLP5)	M24C02-FMH6TG	2	1.7	1.4	0.55	5
	M24C04-FMH6TG	4	1.7	1.4	0.55	5
	M24C08-FMH6TG	8	1.7	1.4	0.55	5
	M24C16-FMH6TG	16	1.7	1.4	0.55	5
	M24C32-FMH6TG	32	1.7	1.4	0.55	5
	M24C64-FMH6TG	64	1.7	1.4	0.55	5
	M24128-BFMH6TG	128	1.7	1.4	0.55	5
DFN8 (UFD _{FPN8} – MLP8)	M24C02-FMC6TG	2	2	3	0.55	8
	M24C04-FMC6TG	4	2	3	0.55	8
	M24C08-FMC6TG	8	2	3	0.55	8
	M24C16-FMC6TG	16	2	3	0.55	8
	M24C32-FMC6TG	32	2	3	0.55	8
	M24C64-FMC6TG	64	2	3	0.55	8
	M24128-BFMC6TG	128	2	3	0.55	8
	M24256-BFMC6TG	256	2	3	0.55	8
	M24512-FMC6TG	512	2	3	0.55	8

Up to 128 Kbits in DFN5 package

Thank you!



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