

UHF tag IC family overview – 840-960 MHz (UHF)

Product features	UCODE® G2XL	UCODE® G2XM	UCODE® G2iL	UCODE® G2iL+	UCODE® G2iM	UCODE® G2iM+	UCODE® 7	UCODE® 7m	UCODE® 7xm	UCODE® 7xm+	UCODE® 8	UCODE® 8m	UCODE® I²C	UCODE® DNA Track	UCODE® DNA City	UCODE® DNA®
RF Interface	840 - 960 MHz															
EPC global standard	1.0.9/1.1.0	1.0.9/1.1.1	1.2.0	1.2.0	1.2.0	1.2.0	1.2.0	1.2.0	1.2.0	1.2.0	2.0.1	2.0.1	1.2.0	GS1 Gen2 v2.0 ISO29167-10	GS1 Gen2 v2.0 ISO29167-10	GS1 Gen2 v2.0 ISO29167-10
User memory [bit]	-	512	-	-	512	up to 640 dep. on EPC size	-	32	1024/2048	2048	-	32	3328	256	1024	3072
EPC code size [bit]	240	240	128	128	256	256-448	128	128	448	448	128	96	160	448	224	224
TID size [bit]	64	64	64	64	96	96	96	96	96	96	96	96	96	96	96	96
Access password [bit]	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Kill password [bit]	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
User password	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-
Data retention [Years]	50	50	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Write endurance [cycles]	100.000	100.000	10.000	10.000	10.000	10.000	100.000	100.000	100.000	100.000	100.000	100.000	50.000	100.000	100.000	100.000
Feature set																
Brand Identifier	-	-	-	-	-	-	-	-	-	-	✓	✓	-	-	-	-
Self Adjust	-	-	-	-	-	-	-	-	-	-	✓	✓	-	-	-	-
Read protection (bankwise)	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	✓	-	-	-
Block perma lock	-	✓	-	-	✓	✓	-	-	✓	✓	-	-	-	✓	✓	✓
Tag authenticaten	-	-	-	-	-	-	-	-	-	-	-	-	-	AES - 128 bit, 1 key	AES - 128 bit, 1 key	AES - 128 bit, 2 keys
Block write	-	-	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
Segmented user memory	-	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓
PSF (Product Status Flag- EAS)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pre-serialization of 96-bit EPC	-	-	-	-	-	-	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
Parallel encoding	-	-	-	-	-	-	✓	✓	✓	✓	✓	-	-	✓	✓	✓
Tag power indicator	-	-	-	-	-	-	✓	✓	✓	✓	✓	-	-	✓	✓	✓
Tag tamper alarm	-	-	-	✓	-	✓	-	-	-	-	-	-	-	-	-	-
Digital switch	-	-	-	✓	-	✓	-	-	-	-	-	-	✓	-	-	-
External supply mode	-	-	-	✓	-	✓	-	-	-	-	-	-	✓	-	-	-
Backscatter strength reduction	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Read range reduction	-	-	✓	✓	-	✓	-	-	-	-	✓	✓	✓	✓	✓	✓
Digital signature [bit]	-	-	-	-	-	-	-	-	-	-	✓	-	-	-	-	-
Untraceable	-	-	-	-	-	-	-	-	✓	✓	✓	✓	-	✓	✓, with crypto	✓, with crypto
Data transfer	-	-	✓	-	✓	-	-	-	-	-	-	-	✓	-	-	-
Bridge mode for fast data transfer	-	-	-	-	-	-	-	-	-	-	-	-	✓	-	-	-
2 UHF Front Ends	-	-	-	-	-	-	-	-	-	-	-	-	✓	-	-	-
I²C Interface	-	-	-	-	-	-	-	-	-	-	-	-	✓	-	-	-
Trust provisioning service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	✓
Packages																
Wafer FCC 150µm, 8"	SL3ICS1202UG	SL3ICS1002FUG	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wafer FCC 120µm, 8"	-	-	SL3S1203FUD	SL3S1213FUD	SL3S1003FUD	SL3S1013FUD	SL3S1204FUD/BG1	SL3S1214FUD/BG1	SL3S1004FUD/BG1 SL3S1024FUD/BG1	SL3S1014FUD/BG1	SL3S1205FUD/HA	SL3S1215FUD/HA	-	SL3S50050NFUD/ 00BG1	SL3S50050NFUD/ 00BG1	SL3S5002NFUD/ 00BG1
Wafer FCC 120µm, 12"	-	-	-	-	-	-	SL3S1204FUD2/BG1	SL3S1214FUD2/BG1	-	-	SL3S1205FUD2/HA	SL3S1215FUD2/HA	-	-	-	-
SOT1122	SL3S1202FTB1	SL3S1002FTB1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SOT886	-	-	SL3S1203FTB0	-	-	SL3S1013FTB0	SL3S1204FTB0/01	SL3S1214FTB0/1	-	-	-	-	-	-	-	-
SOT 902-3 (XQFN8)	-	-	-	-	-	-	-	-	-	-	-	-	SL3S4011FHK	-	-	-