

Shuttle Process	Technology	Tape-In Date TWN Time										
		July	August	September	October	November	December					
5nm	Logic, Fin FET Boost (0.75/1.2V)			Sep			Dec					
6nm	Logic, Fin FET (0.75/1.8V)			Sep			Dec					
7nm	Logic, Fin FET (0.75/1.8V)	Jul				Nov						
16nm	Logic, FinFET Compact (0.8/1.8V)											
	Logic, FinFET Compact Plus (0.8/1.8V)		Aug		Oct		Dec					
	Logic, FinFET Plus (0.8/1.8V)											
28nm	Logic, HPM (0.9/1.8V, 0.9/2.5V)	Jul-15	Aug-12	Sep-16	Oct-14	Nov-18	Dec-16					
	Logic, HPC (0.9/1.8V, 0.9/2.5V)											
	Logic, HPC Plus (0.9/1.8V, 0.9/2.5V)											
	Logic, HP (0.85/1.8V, 0.85/2.5V)											
	Logic, LP (1.05/1.8V, 1.05/2.5V)											
	Logic, HPL (1.0 & 1.8V, 1.0/2.5V)											
	RF HPC Plus (0.9/1.8V, 0.9/2.5V)											
	RF HPC (0.9/1.8V, 0.9/2.5V)											
	RF LP (1.05V/1.8V)											
RF HPL (1.0/1.8V, 1.0/2.5V)												
40nm LP & 45nm GS (45GS = 40G)	Logic, 40LP (1.1/1.8V, 1.1/2.5V)	Jul-21	Aug-11	Sep-22	Oct-13	Nov-10	Dec-8					
	Logic, 40LP Plus (1.1/2.5V)											
	Logic, 40ULP (1.1/2.5V, 0.9/2.5V)											
	Mixed-Signal/RF, 40LP (1.1/1.8V, 1.1/2.5V)											
	Mixed-Signal/RF, 40ULP (1.1/2.5V, 0.9/1.8V, 0.9/2.5V)											
	Logic, 45GS (45GS = 40G) (0.9/1.8V, 0.9/2.5V)											
	High Voltage (1.1/5/6/25/32V)											
	High Voltage (1.1/8/25V)											
	EmbFlash, 40LP (1.1/2.5V)											
	EmbFlash, 40ULP (0.9V/2.5V)											
65nm	Logic, LP/DGO (1.2/2.5V, 1.2/3.3V)	Jul-8	Aug-5	Sep-9	Oct-6	Nov-11	Dec-9					
	Logic, GP/DGO (1.0/1.8V, 1.0/2.5V, 1.0/3.3V)											
	Logic, LP-based TGO (1.0/1.2/2.5V)											
	Logic, ULP (1.0/2.5V)	Jul-8		Sep-9		Nov-11						
	Mixed-Signal/RF, GP (1.0/2.5V)											
	Mixed-Signal/RF, LP (1.2/2.5V)											
.18um	Mixed-Signal/RF, G (1.8/3.3V)	Jul-1	Aug-5	Sep-2	Oct-14	Nov-4	Dec-2					
	Mixed-Signal/RF, G (1.8/3.3V) embedded MTP											
	Mixed-Signal/RF, G (1.8/3.3V) embedded OTP (Kilopass/eMemory)											
	Mixed Signal, G, (1.8/5V)		Aug-5									
	Logic, G (1.8/3.3V)	Jul-1										
	Logic, G (1.8/3.3V), Embedded OTP/MTP		Sep-2									
	Logic, LV (1.5/3.3V)		Aug-5									
	Logic, LP (1.8/3.3V)	Jul-1										
	SiGe BiCMOS, G (1.8/3.3V)							Sep-2	Nov-4			
	CMOS Image Sensor (1.8/3.3V)											
	EmbFlash (1K, 20K) (1.8/3.3V)		Aug-5							Dec-2		
	EmbFlash Enhanced (1.8/3.3V)								Oct-14			
	EmbFlash Enhanced (1.8/5V)											
	EmbFlash HDR (1.8/3.3V)											
	EmbFlash eLL (1.8/3.3V)											
	EmbFlash eLL (1.8/3.3V)											
	High Voltage (1.8/3.3/32V)											
	High Voltage (1.8/5/32V)											
	High Voltage, BCD (Generation-2)	Jul-1										
	High Voltage, BCD (Generation-3)											
	Part 1	Mixed-Signal/RF, G (1.8/3.3V)	Jul-15					Aug-19	Sep-9	Oct-21	Nov-11	Dec-16
		Mixed-Signal/RF, G (1.8/3.3V) embedded MTP										
		Mixed-Signal/RF, G (1.8/3.3V) embedded OTP (Kilopass/eMemory)										
		Mixed Signal, G, (1.8/5V)						Aug-19		Oct-21		
		Logic, G (1.8/3.3V)										
		Logic, G (1.8/3.3V), Embedded OTP/MTP						Jul-15				
		Logic, LV (1.5/3.3V)								Oct-21		
Logic, LP (1.8/3.3V)				Aug-19	Sep-9	Nov-11						
EmbFlash (1K, 20K) (1.8/3.3V)												
EmbFlash Enhanced (1.8/3.3V)												
Part 2	EmbFlash Enhanced (1.8/5V)											
	EmbFlash HDR (1.8/3.3V)											
	EmbFlash eLL (1.8/3.3V)											
	High Voltage (1.8/3.3/32V)											
	High Voltage (1.8/5/32V)											
	High Voltage, BCD (Generation-2)	Jul-15	Aug-19	Sep-9	Oct-21	Nov-11	Dec-16					
	High Voltage, BCD (Generation-3)											
	Part 3	Mixed-Signal/RF, G (1.8/3.3V)	Jul-22		Sep-16		Nov-25					
		Mixed-Signal/RF, G (1.8/3.3V) embedded MTP										
		Mixed-Signal/RF, G (1.8/3.3V) embedded OTP (Kilopass/eMemory)										
Mixed Signal, G, (1.8/5V)												
Logic, G (1.8/3.3V)												
Logic, G (1.8/3.3V), Embedded OTP/MTP				Sep-16		Nov-25						
Logic, LV (1.5/3.3V)												
Logic, LP (1.8/3.3V)		Jul-22										
EmbFlash (1K, 20K) (1.8/3.3V)												
EmbFlash Enhanced (1.8/3.3V)												
Part 3	EmbFlash Enhanced (1.8/5V)											
	EmbFlash HDR (1.8/3.3V)											
	EmbFlash eLL (1.8/3.3V)											
	High Voltage (1.8/3.3/32V)											
	High Voltage (1.8/5/32V)	Jul-22		Sep-16		Nov-25						
High Voltage, BCD (Generation-2)												
High Voltage, BCD (Generation-3)												