

2021 TSMC CyberShuttle Service Plan

Version: 1H V1.0		Sep.24, 2020				
Shuttle Type (Technology)	Tape-In Date (TWN Time) / TM # / Fab / Captain / Technology Availability					
	Jan	Feb	Mar	Apr	May	Jun
5 nm (*)		Feb-25 TMNT51 Fab18 Jeff		Apr-15 TMNT52 Fab18 Shirley		
Logic, FinFET (FF) (0.75/1.2V)		V		V		
6 nm (*)				Apr-28 TMNT66 Fab15 Francis		
Logic, Fin FET (0.75/1.8V)				V		
7 nm (*)			Mar-3 TMNT91 Fab15 Vincent			Jun-16 TMNT92 Fab15 Jerry
Logic, Fin FET (0.75/1.8V)			V			V
12 nm		Feb-22 TMNS15 Fab14 Francis		Apr-13 TMNS16 Fab14 Lynn		Jun-1 TMNS17 Fab14 CC
Logic, FinFET Compact (0.8/1.8V)		V		V		V
Logic, FinFET Compact Plus (0.8/1.8V)		V		V		V
16 nm		Feb-22 TMNS15 Fab14 Francis		Apr-13 TMNS16 Fab14 Lynn		Jun-1 TMNS17 Fab14 CC
Logic, FinFET Compact (0.8/1.8V)		V		V		V
Logic, FinFET Compact Plus (0.8/1.8V)		V		V		V
Logic, FinFET Plus (0.8/1.8V)		V		V		V
22 nm		Feb-23 TMNS21 Fab15 CC		Apr-14 TMNS22 Fab15 Jeff		Jun-9 TMNS23 Fab15 ZR
Logic, ULP (0.8/1.8V, 0.8/2.5V)		V		V		V
Logic, ULL (0.8/1.8V, 0.8/2.5V)		V		V		V
RF ULP (0.8/1.8V)		V		V		V
RF ULL (0.8/1.8V, 0.8/2.5V)		V		V		V
MRAM ULL (0.8/1.8V, 0.8/2.5V)		V		V		V
MRAM RF ULL (0.8/1.8V, 0.8/2.5V)		V		V		V
28 nm	Jan-13 TMNT01 Fab15 ZR	Feb-19 TMNT02 Fab15 Shirley	Mar-17 TMNT03 Fab15 Jerry	Apr-7 TMNT04 Fab15 CC	May-12 TMNT05 Fab15 FK	Jun-16 TMNT06 Fab15 Vincent
Logic, HPM (0.9/1.8V, 0.9/2.5V)	V	V	V	V	V	V
Logic, HPC (0.9/1.8V, 0.9/2.5V)	V	V	V	V	V	V
Logic, HPC Plus (0.9/1.8V, 0.9/2.5V)	V	V	V	V	V	V
Logic, HP (0.85/1.8V, 0.85/2.5V)	V	V	V	V	V	V
Logic, LP (1.05/1.8V, 1.05/2.5V)	V	V	V	V	V	V
Logic, HPL (1.0&1.8V, 1.0/2.5V)	V	V	V	V	V	V
RF HPC Plus (0.9/1.8V, 0.9/2.5V)	V	V	V	V	V	V
RF HPC (0.9/1.8V, 0.9/2.5V)	V	V	V	V	V	V
RF LP (1.05/1.8V)	V	V	V	V	V	V
RF HPL (1.0/1.8V, 1.0/2.5V)	V	V	V	V	V	V
28 nm		Feb-24 TMNT28 Fab15 ZR				
High Voltage (0.9/8/25/28V)		V				
40nm LP & 45nm GS (45GS = 40G)		Feb-23 TMNS28 Fab14 Lynn	Mar-16 TMNS29 Fab12 CC	Apr-13 TMNS30 Fab14 Jerry	May-11 TMNS31 Fab12 Jeff	Jun-15 TMNS32 Fab14 Francis
Logic, 40LP (1.1/1.8V, 1.1/2.5V)	V	V	V	V	V	V
Logic, 40LP Plus (1.1/2.5V)	V	V	V	V	V	V
Logic, 40ULP (1.1/2.5V, 0.9/2.5V)	V	V	V	V	V	V
Mixed-Signal/RF, 40LP (1.1/1.8V, 1.1/2.5V)	V	V	V	V	V	V
Mixed-Signal/RF, 40ULP (1.1/2.5V, 0.9/1.8V, 0.9/2.5V)	V	V	V	V	V	V
Logic, 45GS (45GS = 40G) (0.9/1.8V, 0.9/2.5V)	V	V	V	V	V	V
High Voltage (1.1/5/6/25/32V)	V	V	V	V	V	V
High Voltage (1.1/8/25V)	V	V	V	V	V	V
ReRAM, RF, 40LP (0.9V/2.5V)	V	V	V	V	V	V
EmbFlash, 40LP (1.1/2.5V)	V	V	V	V	V	V
EmbFlash, 40ULP (0.9V/2.5V)	V	V	V	V	V	V
55 nm	Jan-6 TMNS87 Fab12 Vincent		Mar-17 TMNS88 Fab14 ZR		May-5 TMNS89 Fab12 Lynn	Jun-9 TMNS90 Fab12 Shirley
Logic, GP (1.0/1.8V, 1.0/2.5V)	V		V		V	V
Logic, LP (1.2/2.5V)	V		V		V	V
Logic, ULP (0.9V/2.5V)	V		V		V	V
Mixed-Signal/RF, LP(1.2/ 2.5V)	V		V		V	V
Mixed Signal/RF, ULP (0.9V/2.5V)	V		V		V	V
EmbFlash (1.2/2.5V)	V		V		V	V
EmbFlash, ULP (0.9&2.5V)	V		V		V	V
High Voltage (1.2/6/32V)	V		V		V	V
65 nm	Jan-6 TMNT15 Fab14 Lynn	Feb-17 TMNT16 Fab12 Jerry	Mar-17 TMNT17 Fab14 Francis		May-5 TMNT19 Fab14 CC	Jun-9 TMNT20 Fab12 Jeff
Logic, LP/DGO (1.2/2.5V, 1.2/3.3V)	V	V	V		V	V
Logic, GP /DGO (1.0/1.8V, 1.0/2.5V, 1.0/3.3V)	V	V	V		V	V
Logic, LP-based TGO (1.0/1.2/2.5V)	V	V	V		V	V
Logic, ULP (1.0/2.5V)	V	V	V		V	V
Mixed-Signal/RF, GP(1.0/ 2.5V)	V	V	V		V	V
Mixed-Signal/RF, LP(1.2/ 2.5V)	V	V	V		V	V
90 nm	Jan-13 TMNT71 Fab14 Shirley			Apr-21 TMNT72 Fab14 ZR		
Logic, G (1.0/1.8V, 1.0/2.5V, 1.0/3.3V, 1.0/1.8/3.3V)	V			V		
Logic, LP (1.2/2.5V, 1.2/3.3V)	V			V		
Logic, GT (High Performance) (1.2/2.5V)	V			V		
Mixed-Signal/RF, G(1.0/1.8V, 1.0/2.5V, 1.0/3.3V, 1.0/1.8/3.3V)	V			V		
Mixed-Signal/RF, LP (1.2/2.5V, 1.2/3.3V)	V			V		
EmbFlash, LP (1.2/3.3V)	V			V		
0.13 um	Jan-13 TMNT78 Fab12 Jerry	Feb-18 TMNT79 Fab14 FK	Mar-17 TMNT80 Fab6 Shirley	Apr-21 TMNT81 Fab12 Vincent	May-19 TMNT82 Fab6 ZR	Jun-23 TMNT83 Fab14 FK
Logic, G (1.2/2.5V, 1.2/3.3V); FSG	V	V	V	V	V	V
Logic, LP (1.5/2.5V, 1.5/3.3V); FSG	V	V	V	V	V	V
Logic, LV (1.0/2.5V, 1.0/3.3V); FSG	V	V	V	V	V	V
Mixed-Signal/RF, G (1.2/2.5V, 1.2/3.3V); FSG	V	V	V	V	V	V
Mixed-Signal, LP (1.5/3.3V); FSG	V	V	V	V	V	V
High Voltage, BCD (1.5/5/10/20/28/36V)	V	V	V	V	V	V
High Voltage, BCD (1.5/3.3/5/10/20/28/36V)	V	V	V	V	V	V
High Voltage, BCD Plus (5/10/12/16/20/24/28/36/VG5V)	V	V	V	V	V	V
High Voltage, BCD Plus (1.5/5/10/12/16/20/24/28/36/VG1.5/3/5V)	V	V	V	V	V	V
High Voltage, BCD Plus (1.5/3.3/5/10/12/16/20/24/28/36/VG1.5/3/5V)	V	V	V	V	V	V

0.18 um: Part 1	Jan-6 TMNS51 Fab3 Francis		Mar-3 TMNS53 Fab5 YW	Apr-7 TMNS54 SSMC ZR	May-5 TMNS55 Fab8 Jerry	Jun-2 TMNS56 Fab11 Lynn
Mixed-Signal/RF, G (1.8/3.3V)	V		V	V	V	V
Mixed-signal/RF, G (1.8/3.3V) embedded MTP	V		V	V	V	V
Mixed-signal/RF, G (1.8/3.3V) embedded OTP (Kilopass/eMemory)	V		V	V	V	V
Mixed Signal, G, (1.8/5V)	V		V	V	V	V
Logic, G (1.8/3.3V)	V		V	V	V	V
Logic, G (1.8/3.3V), Embedded OTP/ MTP	V		V	V	V	V
Logic, LV (1.5/3.3V)	V		V	V	V	V
Logic, LP (1.8/3.3V)	V		V	V	V	V
SiGe BICMOS, G (1.8/3.3V)	V		V	V	V	V
EmbFlash(1K,20K) (1.8/3.3V)						V
EmbFlash Enhanced (1.8/3.3V)						V
EmbFlash Enhanced (1.8/5V)						V
EmbFlash HDR (1.8/3.3V)						V
EmbFlash eLL(1.8/3.3V)						V
High Voltage (1.8/3.3/32V)					V	
High Voltage (1.8/5/32V)					V	
High Voltage, BCD (Generation-2)			V	V	V	
High Voltage, BCD (Generation-3)			V	V	V	
0.18 um: Part 2	Jan-13 TMNS63 Fab10 Jeff		Mar-10 TMNS64 Fab8 Lynn	Apr-21 TMNS65 Fab11 YW	May-12 TMNS66 Fab5 Vincent	Jun-9 TMNS67 Fab10 FK
Mixed-Signal/RF, G (1.8/3.3V)	V		V	V	V	V
Mixed-signal/RF, G (1.8/3.3V) embedded MTP	V		V	V	V	V
Mixed-signal/RF, G (1.8/3.3V) embedded OTP (Kilopass/eMemory)	V		V	V	V	V
Mixed Signal, G, (1.8/5V)	V		V	V	V	V
Logic, G (1.8/3.3V)	V		V	V	V	V
Logic, G (1.8/3.3V), Embedded OTP/ MTP	V		V	V	V	V
Logic, LV (1.5/3.3V)	V		V	V	V	V
Logic, LP (1.8/3.3V)	V		V	V	V	V
EmbFlash(1K, 20K) (1.8/3.3V)				V	V	V
EmbFlash Enhanced (1.8/3.3V)				V	V	V
EmbFlash Enhanced (1.8/5V)	V			V	V	V
EmbFlash HDR (1.8/3.3V)	V			V	V	V
EmbFlash eLL(1.8/3.3V)				V	V	V
High Voltage (1.8/3.3/32V)			V	V	V	V
High Voltage (1.8/5/32V)			V	V	V	V
High Voltage, BCD (Generation-2)			V	V	V	V
High Voltage, BCD (Generation-3)			V	V	V	V
0.18 um: Part 3	Jan-20 TMNS74 Fab6 Francis		Mar-24 TMNS75 Fab6 Lynn		May-26 TMNS76 Fab6 Vincent	
Mixed-Signal/RF, G (1.8/3.3V)	V		V		V	
Mixed-signal/RF, G (1.8/3.3V) embedded MTP	V		V		V	
Mixed-signal/RF, G (1.8/3.3V) embedded OTP (Kilopass/eMemory)	V		V		V	
Mixed Signal, G, (1.8/5V)	V		V		V	
Logic, G (1.8/3.3V)	V		V		V	
Logic, G (1.8/3.3V), Embedded OTP/ MTP	V		V		V	
Logic, LV (1.5/3.3V)	V		V		V	
Logic, LP (1.8/3.3V)	V		V		V	
EmbFlash(1K, 20K) (1.8/3.3V)						
EmbFlash Enhanced (1.8/3.3V)						
EmbFlash Enhanced (1.8/5V)						
EmbFlash HDR (1.8/3.3V)						
EmbFlash eLL(1.8/3.3V)						
High Voltage (1.8/3.3/32V)	V		V		V	
High Voltage (1.8/5/32V)	V		V		V	
High Voltage, BCD (Generation-2)	V		V		V	
High Voltage, BCD (Generation-3)	V		V		V	
0.25 um	Jan-6 TMNT60 Fab10 YW		Mar-17 TMNT61 Fab8 YW		May-19 TMNT62 Fab10 CC	
Logic, G (2.5/3.3V, 2.5/5V)	V		V		V	
Mixed-Signal/RF, G (2.5/3.3V, 2.5/5V)	V		V		V	
High Voltage, BCD (2.5/5/12/24/40V/g2.5/5V)	V		V		V	
High Voltage, BCD (2.5/5/12/24/40V/g2.5/5/12V)	V		V		V	
High Voltage, BCD (2.5/5/60V/g 2.5/5V)	V		V		V	
High Voltage, BCD (2.5/5/12/24/40/60V/g2.5/5/12V)	V		V		V	
High Voltage, Gen-2 BCD (2.5/5/12/20/24/40/45/60V/g 2.5/5/12V)	V		V		V	
0.35 um: Part 1	Jan-20 TMNT31 Fab3 Vincent				May-5 TMNT32 Fab10 YW	
Logic, G, Polycide/Siicide (3.3/5V)	V				V	
Mixed-Signal, G (3.3/5V)	V				V	
High Voltage, G, DDD (3.3/12/13.5)	V				V	
High Voltage, DDD (3.3/12/13.5/15/18V)	V				V	
High Voltage, BCD (3.3/20/23V/g3.3V)	V				V	
High Voltage, BCD (3.3/5/12/15/20/40V/g3.3/5/12V)	V				V	
0.35 um: Part 2			Mar-3 TMNT35 Fab3 Jerry		May-19 TMNT36 Fab3 Lynn	
SiGe BICMOS, G (3.3V)			V		V	
0.5 um: Part 1				Apr-7 TMNT55 Fab3 YW		Jun-16 TMNT56 Fab3 YW
High Voltage, (5/20/450/600/700/800V)				V		V

* the calendar is Taiwan time

Special Note (*)

1. tsmc owns the right to adjust shuttle plan and will inform customer about the change in 3 months ahead.

2020 TSMC CyberShuttle Service Plan

Version: 2H V1.12		Aug. 24, 2020					
Shuttle Type (Technology)	Jul	Aug	Sep	Oct	Nov	Dec	
5 nm (*)				Oct-22 TMMG97 Fab18 Shirley		Dec-9 TMMG98 Fab18 FK	
Logic, FinFET (FF) (0.75/1.2V)				V		V	
6 nm (*)			Sep-9 TMMF67 Fab15 Francis			Dec-16 TMMF68 Fab15 CC	
Logic, Fin FET (0.75/1.8V)			V			V	
7 nm (*)	Jul-29 TMMF77 Fab15 Jeff				Nov-4 TMMF78 Fab15 Vincent		
Logic, Fin FET (0.75/1.8V)	V				V		
12 nm (*)		Aug-4 TMMG78 Fab14 Lynn		Oct-6 TMMG79 Fab14 Jerry		Dec-1 TMMF99 Fab14 Jeff	
Logic, FinFET Compact (0.8/1.8V)		V		V		V	
Logic, FinFET Compact Plus (0.8/1.8V)		V		V		V	
16 nm (*)		Aug-4 TMMG78 Fab14 Lynn		Oct-6 TMMG79 Fab14 Jerry		Dec-1 TMMF99 Fab14 Jeff	
Logic, FinFET Compact (0.8/1.8V)		V		V		V	
Logic, FinFET Compact Plus (0.8/1.8V)		V		V		V	
Logic, FinFET Plus (0.8/1.8V)		V		V		V	
22 nm		Aug-12 TMMF23 Fab15 Vincent		Oct-14 TMMF24 Fab15 ZR		Dec-16 TMMF25 Fab15 Jerry	
Logic, ULP (0.8/1.8V, 0.8/2.5V)		V		V		V	
Logic, ULL (0.8/1.8V, 0.8/2.5V)		V		V		V	
RF ULP (0.8/1.8V)		V		V		V	
RF ULL (0.8/1.8V, 0.8/2.5V)		V		V		V	
MRAM ULL (0.8/1.8V, 0.8/2.5V)		V		V		V	
MRAM RF ULL (0.8/1.8V, 0.8/2.5V)		V		V		V	
28 nm	Jul-15 TMMH07 Fab15 Lynn	Aug-12 TMMH08 Fab15 ZR	Sep-16 TMMH09 Fab15 FK	Oct-14 TMMH10 Fab15 CC	Nov-18 TMMH11 Fab15 Lynn	Dec-16 TMMH12 Fab15 Francis	
Logic, HPM (0.9/1.8V, 0.9/2.5V)	V	V	V	V	V	V	
Logic, HPC (0.9/1.8V, 0.9/2.5V)	V	V	V	V	V	V	
Logic, HPC Plus (0.9/1.8V, 0.9/2.5V)	V	V	V	V	V	V	
Logic, HP (0.85/1.8V, 0.85/2.5V)	V	V	V	V	V	V	
Logic, LP (1.05/1.8V, 1.05/2.5V)	V	V	V	V	V	V	
Logic, HPL (1.0/1.8V, 1.0/2.5V)	V	V	V	V	V	V	
RF HPC Plus (0.9/1.8V, 0.9/2.5V)	V	V	V	V	V	V	
RF HPC (0.9/1.8V, 0.9/2.5V)	V	V	V	V	V	V	
RF LP (1.05/1.8V)	V	V	V	V	V	V	
RF HPL (1.0/1.8V, 1.0/2.5V)	V	V	V	V	V	V	
40nm LP & 45nm GS (45GS = 40G)	Jul-21 TMMG87 Fab12 Shirley	Aug-11 TMMG88 Fab14 Jerry	Sep-22 TMMG89 Fab12 Jeff	Oct-13 TMMG90 Fab14 Lynn	Nov-10 TMMG91 Fab15 Francis	Dec-8 TMMG92 Fab14 ZR	
Logic, 40LP (1.1/1.8V, 1.1/2.5V)	V	V	V	V	V	V	
Logic, 40LP Plus (1.1/2.5V)	V	V	V	V	V	V	
Logic, 40ULP (1.1/2.5V, 0.9/2.5V)	V	V	V	V	V	V	
Mixed-Signal/RF, 40LP (1.1/1.8V, 1.1/2.5V)	V	V	V	V	V	V	
Mixed-Signal/RF, 40ULP (1.1/2.5V, 0.9/1.8V, 0.9/2.5V)	V	V	V	V	V	V	
Logic, 45GS (45GS = 40G) (0.9/1.8V, 0.9/2.5V)	V	V	V	V	V	V	
High Voltage (1.1/5/6/25/32V)	V	V	V	V	V	V	
High Voltage (1.1/8/25V)	V	V	V	V	V	V	
ReRAM, RF 40ULP (0.9/2.5V)	V	V	V	V	V	V	
EmbFlash, 40LP (1.1/2.5V)	V	V	V	V	V	V	
EmbFlash, 40ULP (0.9/2.5V)	V	V	V	V	V	V	
55 nm	Jul-8 TMMG56 Fab14 ZR	Aug-5 TMMG57 Fab12 Francis		Oct-6 TMMG59 Fab12 Vincent	Nov-11 TMMG60 Fab14 Jeff		
Logic, GP (1.0/1.8V, 1.0/2.5V)	V	V		V	V		
Logic, LP (1.2/2.5V)	V	V		V	V		
Logic, ULP (0.9/2.5V)	V	V		V	V		
Mixed-Signal/RF, LP(1.2/2.5V)	V	V		V	V		
Mixed Signal/RF, ULP (0.9/2.5V)	V	V		V	V		
EmbFlash (1.2/2.5V)	V	V		V	V		
EmbFlash, ULP (0.9&2.5V)	V	V		V	V		
High Voltage (1.2/6/32V)	V	V		V	V		
65 nm	Jul-8 TMMG67 Fab14 Vincent	Aug-5 TMMG68 Fab12 CC	Sep-9 TMMG69 Fab14 Vincent	Oct-6 TMMG70 Fab12 FK	Nov-11 TMMG71 Fab14 CC	Dec-9 TMMG72 Fab12 Lynn	
Logic, LP/DGO (1.2/2.5V, 1.2/3.3V)	V	V	V	V	V	V	
Logic, GP /DGO (1.0/1.8V, 1.0/2.5V, 1.0/3.3V)	V	V	V	V	V	V	
Logic, LP-based TGO (1.0/1.2/2.5V)	V	V	V	V	V	V	
Logic, ULP (1.0/2.5V)	V	V	V	V	V	V	
Mixed-Signal/RF, GP(1.0/ 2.5V)	V	V	V	V	V	V	
Mixed-Signal/RF, LP(1.2/ 2.5V)	V	V	V	V	V	V	
80 nm							
Logic, GC (1.0/2.5V, 1.0/3.3V)							
Logic, High Performance (1.2/2.5V)							
Mixed-Signal, GC (1.0/2.5V, 1.0/3.3V)							
High Voltage (1.2/5/6/32V)							
90 nm		Aug-5 TMMF96 Fab14 Shirley			Nov-4 TMMF97 Fab14 FK		
Logic, G (1.0/1.8V, 1.0/2.5V, 1.0/3.3V, 1.0/1.8/3.3V)		V			V		
Logic, LP (1.2/2.5V, 1.2/3.3V)		V			V		
Logic, GT (High Performance) (1.2/2.5V)		V			V		
Mixed-Signal/RF, G(1.0/1.8V, 1.0/2.5V, 1.0/3.3V, 1.0/1.8/3.3V)		V			V		
Mixed-Signal/RF, LP (1.2/2.5V, 1.2/3.3V)		V			V		
EmbFlash, LP (1.2/3.3V)		V			V		
High Voltage, BCD (1.5/1.8/4.5/6/Vq1.5/5V)		V			V		
0.11 um							
Mixed-Signal, G (1.2/3.3V), FSG, Hybrid							
Mixed-Signal, LP (1.2/3.3V), FSG, Hybrid							
0.13 um	Jul-22 TMMF85 Fab6 Francis	Aug-19 TMMF86 Fab14 FK	Sep-23 TMMF87 Fab14 Jerry	Oct-21 TMMF88 Fab14 Jeff	Nov-25 TMMF89 Fab12 CC	Dec-21 TMMF90 Fab6 Vincent	
Logic, G (1.2/2.5V, 1.2/3.3V); FSG	V	V	V	V	V	V	
Logic, LP (1.5/2.5V, 1.5/3.3V); FSG	V	V	V	V	V	V	
Logic, LV (1.0/2.5V, 1.0/3.3V); FSG	V	V	V	V	V	V	
Mixed-Signal/RF, G (1.2/2.5V, 1.2/3.3V); FSG	V	V	V	V	V	V	
Mixed-Signal, LP (1.5/3.3V); FSG	V	V	V	V	V	V	
High Voltage, BCD (1.5/5/10/20/28/36V)	V	V	V	V	V	V	
High Voltage, BCD (1.5/3.3/5/10/20/28/36V)	V	V	V	V	V	V	
High Voltage, BCD Plus (5/10/12/16/20/24/28/36/VG5V)	V	V	V	V	V	V	
High Voltage, BCD Plus (1.5/5/10/12/16/20/24/28/36/VG1.5/5V)	V	V	V	V	V	V	
High Voltage, BCD Plus (1.5/3.3/5/10/12/16/20/24/28/36/VG1.5/3.3/5V)	V	V	V	V	V	V	

