

2022 TSMC CyberShuttle Service Plan

Shuttle Type (Technology)	Tape-In Date (TWN Time)/ TM # / Fab / Captain / Technology Availability					
	Jan	Feb	Mar	Apr	May	Jun
3 nm (*)						
Logic, Fin FET (0.75/1.2V)						
4 nm (*)	Jan-5 TMQL95 Fab18 ZR V					
Logic, Fin FET (0.75/1.2V)						
5 nm (*)			Mar-16 TMQL90 Fab18 Vincent V			
Logic, FinFET (FF) (0.75/1.2V)						
6 nm (*)						Jun-8 TMQL76 Fab15 Jeff V
Logic, Fin FET (0.75/1.8V)						
7 nm (*)	Jan-5 TMQL72 FAB15 Lynn V		Mar-16 TMQL73 Fab15 Francis V			
Logic, Fin FET (0.75/1.8V)						
12 nm		Feb-15 TMQL80 Fab14 Jerry V V		Apr-19 TMQL81 Fab14 Lynn V V		Jun-7 TMQL82 Fab14 Francis V V
Logic, FinFET Compact (0.8/1.8V)						
Logic, FinFET Compact Plus (0.8/1.8V)						
16 nm		Feb-15 TMQL80 Fab14 Jerry V V V V		Apr-19 TMQL81 Fab14 Lynn V V V V		Jun-7 TMQL82 Fab14 Francis V V V V
Logic, FinFET Compact (0.8/1.8V)						
Logic, FinFET Compact Plus (0.8/1.8V)						
Logic, FinFET Plus (0.8/1.8V)						
RF, FinFET Compact (0.8/1.8V)						
22 nm	Jan-5 TMQL32 Fab15 Vincent V V V V V V V		Mar-23 TMQL33 Fab15 Jeff V V V V V	Apr-27 TMQL34 Fab15 ZR V V V V	May-25 TMQL35 Fab15 FK V V V V	
Logic, ULP (0.8/1.8V, 0.8/2.5V)						
Logic, ULL (0.8/1.8V, 0.8/2.5V)						
RF ULP (0.8/1.8V)						
RF ULL (0.8/1.8V, 0.8/2.5V)						
MRAM ULL (0.8/1.8V, 0.8/2.5V)						
MRAM RF ULL (0.8/1.8V, 0.8/2.5V)						
ReRAM RF ULL (0.8/2.5V)						
28 nm	Jan-12 TMQL20 Fab15 Francis V V V V V V V V V	Feb-23 TMQL21 Fab15 Vincent V V V V V V V	Mar-9 TMQL22 Fab15 Lynn V V V V V		May-11 TMQL23 Fab15 Jeff V V V V	Jun-15 TMQL24 Fab15 Vincent V V V V V
Logic, HPM (0.9/1.8V, 0.9/2.5V)						
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)		Feb-15 TMQL40 Fab14 FK V V	Mar-8 TMQL41 Fab12 FK V V	Apr-12 TMQL42 Fab14 Jerry V V	May-17 TMQL43 Fab12 Lynn V V	Jun-21 TMQL44 Fab14 Jerry V V
Logic, 40LP (1.1/1.8V, 1.1/2.5V)						
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)		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
Logic, 45GS (45GS = 40G) (0.9/1.8V, 0.9/2.5V)		V	V	V	V	V
High Voltage (1.1/5/6/25/32V)			V		V	
High Voltage (1.1/8/25V)			V		V	
ReRAM, RF 40ULP (0.9V/2.5V)			V		V	
EmbFlash, 40LP (1.1/2.5V)		V		V		V
EmbFlash, 40ULP (0.9V/2.5V)		V		V		V
55 nm	Jan-19 TMQL52 Fab14 Jeff			Apr-20 TMQL53 Fab12 Francis	May-18 TMQL54 Fab14 Francis	
Logic, GP (1.0/1.8V, 1.0/2.5V)	V			V	V	
Logic, LP (1.2/2.5V)	V			V	V	
Logic, ULP (0.9V/2.5V)	V			V	V	
Mixed-Signal/RF, LP(1.2/ 2.5V)	V			V	V	
Mixed Signal/RF, ULP (0.9V/2.5V)	V			V	V	
EmbFlash (1.2/2.5V)	V				V	
EmbFlash, ULP (0.9&2.5V)	V				V	
High Voltage (1.2/6/32V)						
65 nm	Jan-12 TMQL60 Fab14 MC	Feb-23 TMQL61 Fab12 YW	Mar-16 TMQL62 Fab14 ZR	Apr-27 TMQL63 Fab12 Vincent	May-11 TMQL64 Fab14 Jerry	Jun-15 TMQL65 Fab12 FK
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
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
90 nm			Mar-23 TMQL86 Fab14 Jerry		May-25 TMQL87 Fab14 Vincent	
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-19 TMQL07 Fab14 Jerry	Feb-23 TMQL08 Fab12 Francis	Mar-23 TMQL09 Fab6 YW	Apr-13 TMQL10 Fab14 Jeff	May-18 TMQL11 Fab6 ZR	Jun-22 TMQL12 Fab12 Lynn
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	
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
0.18 um: Part 1	Jan-12 TMQM01 Fab5 FK		Mar-9 TMQM02 SSMC YW	Apr-13 TMQM03 Fab3 YW	May-11 TMQM04 Fab8 JR	Jun-8 TMQM05 Fab3 JR
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
Mixed-signal/RF, G (1.8/3.3V) embedded OTP (Kilopass/eMemory)				V	V	V
Mixed Signal, G, (1.8/5V)			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
Logic, LV (1.5/3.3V)	V			V		V
Logic, LP (1.8/3.3V)	V		V		V	
SiGe BiCMOS, G (1.8/3.3V)				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	
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-5		Mar-16	Apr-20	May-18	Jun-15
	TMQM11		TMQM12	TMQM13	TMQM14	TMQM15
	Fab6		Fab8	Fab10	Fab5	Fab10
	JR		JR	JR	YW	ZR
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
Mixed-signal/RF, G (1.8/3.3V) embedded OTP (Kilopass/eMemory)	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
Logic, G (1.8/3.3V), Embedded OTP/ MTP	V		V	V		V
Logic, LV (1.5/3.3V)	V				V	
Logic, LP (1.8/3.3V)			V		V	
EmbFlash(1K, 20K) (1.8/3.3V)						
EmbFlash Enhanced (1.8/3.3V)				V		
EmbFlash Enhanced (1.8/5V)				V		
EmbFlash HDR (1.8/3.3V)						
EmbFlash eLL(1.8/3.3V)						
High Voltage (1.8/3.3/32V)			V			
High Voltage (1.8/5/32V)			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-19			Apr-27		Jun-22
	TMQM21			TMQM22		TMQM23
	Fab8			Fab6		Fab6
	JR			FK		JR
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					
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					
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					
High Voltage (1.8/5/32V)	V					
High Voltage, BCD (Generation-2)	V			V		V
High Voltage, BCD (Generation-3)	V			V		V
0.25 um	Jan-5			Apr-27		
	TMQL01			TMQL02		
	Fab8			Fab10		
	YW			YW		
Logic, G (2.5/3.3V, 2.5/5V)	V			V		
Mixed-Signal/RF, G (2.5/3.3V, 2.5/5V)	V			V		
High Voltage, BCD (2.5/5/12/24/40V/Vg2.5/5V)	V			V		
High Voltage, BCD (2.5/5/12/24/40V/Vg2.5/5/12V)	V			V		
High Voltage, BCD (2.5/5/60V/Vg 2.5/5V)	V					
High Voltage, BCD (2.5/5/12/24/40/60V/Vg2.5/5/12V)	V					
High Voltage, Gen-2 BCD (2.5/5/7/12/20/24/40/45/60V/Vg 2.5/5/12V)	V			V		
0.35 um: Part 1	Jan-19				May-4	
	TMQM30				TMQM31	
	Fab3				Fab10	
	YW				YW	
Logic, G, Polycide/Silicide (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 (3.3/20/23/Vg3.3V)	V					
High Voltage, BCD (3.3/5/12/15/20/40/Vg3.3/5/12V)	V					
0.35 um: Part 2			Mar-2			
			TMQM34			
			Fab3			
			JR			
SiGe BiCMOS, G (3.3V)			V			
0.5 um: Part 1						Jun-22
						TMQM38
						Fab3
						YW
High Voltage, (5/20/450/600/700/800V)						V

2022H2 TSMC CyberShuttle Service Plan

Shuttle Type (Technology)	Tape-In Date (TWN Time)/ TM # / Fab / Captain / Technology Availability					
	Jul	Aug	Sep	Oct	Nov	Dec
3 nm (*)			Sep-7 TMQL99 FAB12 ZR V			
Logic, Fin FET (0.75/1.2V)						
5 nm (*)				Oct-5 TMQL91 Fab18 Lynn V		
Logic, FinFET (FF) (0.75/1.2V)						
6 nm (*)				Oct-19 TMQL77 FAB15 Jerry V		
Logic, Fin FET (0.75/1.8V)						
7 nm (*)			Sep-21 TMQL74 Fab15 Jeff V			Dec-14 TMQL75 Fab15 Vincent V
Logic, Fin FET (0.75/1.8V)						
12 nm		Aug-9 TMQL83 Fab14 Francis V V		Oct-4 TMQL84 Fab14 FK V V		Dec-6 TMQL85 Fab14 Jeff V V
Logic, FinFET Compact (0.8/1.8V)						
Logic, FinFET Compact Plus (0.8/1.8V)						
16 nm		Aug-9 TMQL83 Fab14 Francis V V V V		Oct-4 TMQL84 Fab14 FK V V V V		Dec-6 TMQL85 Fab14 Jeff V V V V
Logic, FinFET Compact (0.8/1.8V)						
Logic, FinFET Compact Plus (0.8/1.8V)						
Logic, FinFET Plus (0.8/1.8V)						
RF, FinFET Compact (0.8/1.8V)						
22 nm	Jul-13 TMQL36 Fab15 Vincent V V V V V V V		Sep-6 TMQL37 Fab15 Francis V V V V V	Oct-19 TMQL38 Fab15 CF V V V V	Nov-9 TMQL39 Fab15 ZR V V V V	
Logic, ULP (0.8/1.8V, 0.8/2.5V)						
Logic, ULL (0.8/1.8V, 0.8/2.5V)						
RF ULP (0.8/1.8V)						
RF ULL (0.8/1.8V, 0.8/2.5V)						
MRAM ULL (0.8/1.8V, 0.8/2.5V)						
MRAM RF ULL (0.8/1.8V, 0.8/2.5V)						
ReRAM RF ULL (0.8/2.5V)						
28 nm	Jul-20 TMQL25 Fab15 Jerry V V V V V V V V V V	Aug-17 TMQL26 Fab15 CF V V V V V V V V V	Sep-21 TMQL27 Fab15 Vincent V V V V V V V		Nov-16 TMQL28 Fab15 CF V V V V V	Dec-14 TMQL29 Fab15 Lynn V V V V V V
Logic, HPM (0.9/1.8V, 0.9/2.5V)						
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)		Aug-9 TMQL45 Fab14 Jerry V V V V V V V V	Sep-13 TMQL46 Fab12 FK V V V	Oct-18 TMQL47 Fab14 Francis V V V	Nov-8 TMQL48 Fab12 Jeff V V	Dec-6 TMQL49 Fab14 ZR V V
Logic, 40LP (1.1/1.8V, 1.1/2.5V)						
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)						
ReRAM, RF 40ULP (0.9V/2.5V)						
EmbFlash, 40LP (1.1/2.5V)						
EmbFlash, 40ULP (0.9V/2.5V)						

55 nm	Jul-6 TMQL55 Fab12 Francis			Oct-12 TMQL56 Fab14 Vincent		
Logic, GP (1.0/1.8V, 1.0/2.5V)	V			V		
Logic, LP (1.2/2.5V)	V			V		
Logic, ULP (0.9V/2.5V)	V			V		
Mixed-Signal/RF, LP(1.2/ 2.5V)	V			V		
Mixed Signal/RF, ULP (0.9V/2.5V)	V			V		
EmbFlash (1.2/2.5V)				V		
EmbFlash, ULP (0.9&2.5V)				V		
High Voltage (1.2/6/32V)				V		
65 nm	Jul-6 TMQL66 Fab14 ZR	Aug-10 TMQL67 Fab12 JR	Sep-14 TMQL68 Fab14 CF	Oct-5 TMQL69 Fab12 JR	Nov-9 TMQL70 Fab14 Francis	Dec-14 TMQL71 Fab12 CF
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
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
90 nm		Aug-24 TMQL88 Fab14 YW				Dec-21 TMQL89 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
0.13 um		Aug-3 TMQL13 Fab12 Lynn			Nov-23 TMQL14 Fab14 Jerry	
Logic, G (1.2/2.5V,1.2/3.3V); FSG		V			V	
Logic, LP (1.5/2.5V,1.5/3.3V); FSG		V			V	
Logic, LV (1.0/2.5V,1.0/3.3V); FSG		V			V	
Mixed-Signal/RF, G (1.2/2.5V,1.2/3.3V); FSG		V			V	
Mixed-Signal, LP (1.5/3.3V); FSG					V	
High Voltage, BCD (1.5/5/10/20/28/36V)		V			V	
High Voltage, BCD (1.5/3.3/5/10/20/28/36V)		V			V	
High Voltage, BCD Plus (5/10/12/16/20/24/28/36/VG5V)		V			V	
High Voltage, BCD Plus (1.5/5/10/12/16/20/24/28/36/VG1.5/5V)		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	
0.18 um: Part 1	Jul-6 TMQM06 Fab5 JR	Aug-3 TMQM07 Fab10 Jeff	Sep-7 TMQM08 SSMC Lynn	Oct-5 TMQM09 Fab3 SW		Dec-7 TMQM10 Fab3 SW
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
Mixed-signal/RF, G (1.8/3.3V) embedded OTP (Kilopass/eMemory)		V		V		V
Mixed Signal, G, (1.8/5V)		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
Logic, LV (1.5/3.3V)	V			V		V
Logic, LP (1.8/3.3V)	V		V			
SiGe BiCMOS, G (1.8/3.3V)				V		
EmbFlash(1K,20K) (1.8/3.3V)						V
EmbFlash Enhanced (1.8/3.3V)		V				V
EmbFlash Enhanced (1.8/5V)		V				V
EmbFlash HDR (1.8/3.3V)						V
EmbFlash eLL(1.8/3.3V)						V
High Voltage (1.8/3.3/32V)						
High Voltage (1.8/5/32V)						
High Voltage, BCD (Generation-2)	V		V			
High Voltage, BCD (Generation-3)	V		V			
0.18 um: Part 2		Aug-17 TMQM16 Fab6 SW	Sep-14 TMQM17 Fab8 JR	Oct-19 TMQM18 Fab5 YW	Nov-16 TMQM19 Fab8 JR	Dec-14 TMQM20 Fab10 JR
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
Mixed-signal/RF, G (1.8/3.3V) embedded OTP (Kilopass/eMemory)		V	V		V	V
Mixed Signal, G, (1.8/5V)			V	V	V	V
Logic, G (1.8/3.3V)		V	V		V	V

Special note

1. tsmc owns the right to adjust shuttle plan and will inform customers through TSMC on_line Cybershuttle bulletin.
2. Oct-4 N12/N16 shuttle capacity enlarges to 2X by special arrangement.