

## 2021 TSMC CyberShuttle Service Plan

Shuttle Type (Technology)	Tape-In Date (TWN Time) / TM # / Fab / Captain / Technology Availability					
	Jan	Feb	Mar	Apr	May	Jun
<b>5 nm (*)</b>		Feb-25 TMNT51 Fab18 Jeff		Apr-15 TMNT52 Fab18 Shirley		
Logic, FinFET (FF) (0.75/1.2V)		V		V		
<b>6 nm (*)</b>				Apr-28 TMNT66 Fab15 Francis		
Logic, Fin FET (0.75/1.8V)				V		
<b>7 nm (*)</b>			Mar-3 TMNT91 Fab15 Vincent			Jun-16 TMNT92 Fab15 Jerry
Logic, Fin FET (0.75/1.8V)			V			V
<b>12 nm</b>		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
<b>16 nm</b>		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
<b>22 nm</b>		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
<b>28 nm</b>	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 (1.05V/1.8V)	V	V	V	V	V	V
RF HPL (1.0/1.8V, 1.0/2.5V)	V	V	V	V	V	V
<b>28 nm</b>		Feb-24 TMNT28 Fab15 ZR				
High Voltage (0.9/8/25/28V)		V				
<b>40nm LP &amp; 45nm GS (45GS = 40G)</b>		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
<b>55 nm</b>	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
<b>65 nm</b>	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
<b>90 nm</b>	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		
<b>0.13 um</b>	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

	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	
<b>0.18 um: Part 2</b>	<b>Jan-13</b> <b>TMNS63</b> <b>Fab10</b> <b>Jeff</b>		<b>Mar-10</b> <b>TMNS64</b> <b>Fab8</b> <b>Lynn</b>	<b>Apr-21</b> <b>TMNS65</b> <b>Fab11</b> <b>YW</b>	<b>May-12</b> <b>TMNS66</b> <b>Fab5</b> <b>Vincent</b>	<b>Jun-9</b> <b>TMNS67</b> <b>Fab10</b> <b>FK</b>
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	V	V
EmbFlash Enhanced (1.8/3.3V)	V		V	V	V	V
EmbFlash Enhanced (1.8/5V)	V		V	V	V	V
EmbFlash HDR (1.8/3.3V)	V		V	V	V	V
EmbFlash eLL(1.8/3.3V)	V		V	V	V	V
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	V
High Voltage, BCD (Generation-3)			V	V	V	V
<b>0.18 um: Part 3</b>	<b>Jan-20</b> <b>TMNS74</b> <b>Fab6</b> <b>Francis</b>		<b>Mar-24</b> <b>TMNS75</b> <b>Fab6</b> <b>Lynn</b>		<b>May-26</b> <b>TMNS76</b> <b>Fab5</b> <b>Vincent</b>	
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)	V		V		V	
EmbFlash Enhanced (1.8/3.3V)	V		V		V	
EmbFlash Enhanced (1.8/5V)	V		V		V	
EmbFlash HDR (1.8/3.3V)	V		V		V	
EmbFlash eLL(1.8/3.3V)	V		V		V	
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	
<b>0.25 um</b>	<b>Jan-6</b> <b>TMNT60</b> <b>Fab10</b> <b>YW</b>		<b>Mar-17</b> <b>TMNT61</b> <b>Fab8</b> <b>YW</b>		<b>May-19</b> <b>TMNT62</b> <b>Fab10</b> <b>CC</b>	
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	
<b>0.35 um: Part 1</b>	<b>Jan-20</b> <b>TMNT31</b> <b>Fab3</b> <b>Vincent</b>				<b>May-5</b> <b>TMNT32</b> <b>Fab10</b> <b>YW</b>	
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	
<b>0.35 um: Part 2</b>			<b>Mar-3</b> <b>TMNT35</b> <b>Fab3</b> <b>Jerry</b>		<b>May-19</b> <b>TMNT36</b> <b>Fab3</b> <b>Lynn</b>	
SiGe BICMOS, G (3.3V)			V		V	
<b>0.5 um: Part 1</b>				<b>Apr-7</b> <b>TMNT55</b> <b>Fab3</b> <b>YW</b>		<b>Jun-16</b> <b>TMNT56</b> <b>Fab3</b> <b>YW</b>
High Voltage, (5/20/450/600/700/800V)				V		V

\* the calendar is Taiwan time

Please email cybershuttle@tsmc.com

Frank	Frank Lu	glu@tsmc.com	702-3629705-8779
Shirley	Shirley Kuo	hkuob@tsmc.com	702-3619705-6744
FK	Feng-Kai Chen	fkchen@tsmc.com	702-3104705-6749
ZR	Zi-Ran Huang	zrhuang@tsmc.com	702-2199705-6748
Francis	Francis Tsai	YITSAIA@tsmc.com	702-3627705-6742
CC	Chia-Ching Shen	ccshenb@tsmc.com	702-3639705-6747
ZY	Jerry Zhang	zyzhanga@tsmc.com	702-3694705-6751
Vincent	Vincent Lo	ilo@tsmc.com	702-3650705-6745
YW	Yi-Yang Cheng	yyc@tsmc.com	702-3630705-6743
Jeff	Jeff Cheng	cycheng@tsmc.com	702-3618705-6746
Lynn	Lynn Tsai	wtsaie@tsmc.com	702-3485705-6750

**Special Note (\*)**

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

**Change History :**

1. Release 1H2021 CyberShuttle Schedule

## 2020 TSMC CyberShuttle Service Plan

Version: 2H V1.12		Aug. 24, 2020					
Shuttle Type (Technology)	Jul	Aug	Sep	Oct	Nov	Dec	
<b>5 nm (*)</b>				Oct-22 TMMG97 Fab18 Shirley		Dec-9 TMMG98 Fab18 FK	
Logic, FinFET (FF) (0.75/1.2V)				V		V	
<b>6 nm (*)</b>			Sep-9 TMMF67 Fab15 Francis			Dec-16 TMMF68 Fab15 CC	
Logic, Fin FET (0.75/1.8V)			V			V	
<b>7 nm (*)</b>	Jul-29 TMMF77 Fab15 Jeff				Nov-4 TMMF78 Fab15 Vincent		
Logic, Fin FET (0.75/1.8V)	V				V		
<b>12 nm (*)</b>		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	
<b>16 nm (*)</b>		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	
<b>22 nm</b>		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	
<b>28 nm</b>	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	
<b>40nm LP &amp; 45nm GS (45GS = 40G)</b>	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	
<b>55 nm</b>	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		
<b>65 nm</b>	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	
<b>80 nm</b>							
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)							
<b>90 nm</b>		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		
<b>0.11 um</b>							
Mixed-Signal, G (1.2/3.3V), FSG, Hybrid							
Mixed-Signal, LP (1.2/3.3V), FSG, Hybrid							
<b>0.13 um</b>	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	

0.152um							
Logic, G (1.8/3.3V) Mixed-Signal, G (1.8/3.3V) Mixed-Signal GPIIA, G (1.8/5V)							
0.18 um: Part 1	<b>Jul-1</b> TMMG07 Fab5 Francis	<b>Aug-5</b> TMMG08 Fab11 FK	<b>Sep-2</b> TMMG09 Fab3 Shirley	<b>Oct-14</b> TMMG10 Fab10 YW	<b>Nov-4</b> TMMG11 Fab3 ZR	<b>Dec-2</b> TMMG12 Fab11 Shirley	
Mixed-Signal/RF, G (1.8/3.3V) 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 Logic, LV (1.5/3.3V) Logic, LP (1.8/3.3V) SiGe BiCMOS, G (1.8/3.3V) CMOS Image Sensor (1.8/3.3V) 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) High Voltage (1.8/5/32V) High Voltage, BCD (Generation-2) High Voltage, BCD (Generation-3)	V V	V V V V V V V V V V V V V V V V V V V V	V V	V V	V V	V V	V V
0.18 um: Part 2	<b>Jul-15</b> TMMG18 Fab6 Jerry	<b>Aug-19</b> TMMG19 SSMC CC	<b>Sep-9</b> TMMG20 Fab8 ZR	<b>Oct-21</b> TMMG21 Fab5 Francis	<b>Nov-11</b> TMMG22 Fab8 Jerry	<b>Dec-16</b> TMMG23 Fab10 Shirley	
Mixed-Signal/RF, G (1.8/3.3V) 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 Logic, LV (1.5/3.3V) Logic, LP (1.8/3.3V) 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) High Voltage (1.8/5/32V) High Voltage, BCD (Generation-2) High Voltage, BCD (Generation-3)	V V	V V	V V	V V	V V	V V	V V
0.18 um: Part 3	<b>Jul-22</b> TMMG29 Fab8 ZR		<b>Sep-16</b> TMMG30 Fab6 Lynn		<b>Nov-25</b> TMMG32 Fab6 Jerry		
Mixed-Signal/RF, G (1.8/3.3V) 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 Logic, LV (1.5/3.3V) Logic, LP (1.8/3.3V) 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) High Voltage (1.8/5/32V) High Voltage, BCD (Generation-2) High Voltage, BCD (Generation-3)	V V		V V		V V		
0.25 um	<b>Jul-8</b> TMMF70 Fab10 YW		<b>Sep-2</b> TMMF72 Fab8 YW		<b>Nov-4</b> TMMF73 Fab10 YW		
Logic, G (2.5/3.3V, 2.5/5V) Mixed-Signal/RF, G (2.5/3.3V, 2.5/5V) High Voltage, BCD (2.5/5/12/24/40V/g2.5/5/12V) High Voltage, BCD (2.5/5/12/24/40V/g2.5/5/12V) High Voltage, BCD (2.5/5/60V/g 2.5/5V) High Voltage, BCD (2.5/5/12/24/40/60N/g2.5/5/12V) High Voltage, Gen-2 BCD (2.5/5/7/12/20/24/40/45/60V/g 2.5/5/12V)	V V V V V V V		V V V V V V V		V V V V V V V		
0.35 um: Part 1		<b>Aug-19</b> TMMF36 Fab3 YW			<b>Nov-11</b> TMMF37 Fab10 YW		
Logic, G, Polycide/Silicde (3.3/5V) Mixed-Signal, G (3.3/5V) High Voltage, G, DDD (3.3/12/13.5) High Voltage, DDD (3.3/12/13.5/15/18V) High Voltage, BCD (3.3/20/23V/g3.3V) High Voltage, BCD (3.3/5/12/15/20/40V/g3.3/5/12V)		V V V V V V			V V V V V V		
0.35 um: Part 2			<b>Sep-23</b> TMMG93 Fab3 Vincent		<b>Nov-18</b> TMMG94 Fab3 ZR		
SiGe BiCMOS, G (3.3V)					V		
0.5 um: Part 1			<b>Sep-9</b> TMMF53 Fab3 CC			<b>Dec-9</b> TMMF54 Fab3 YW	
High Voltage, (5/20/450/600/700/800V)			V			V	
0.5 um: Part 2							
High Voltage, GaN (650V) High Voltage, GaN (100V)							

\* the calendar is Taiwan time

Please email cybershuttle@tsmc.com

Special Note (\*)  
1. tsmc owns the right to adjust shuttle plan and will inform customer about the change in 3 months ahead.

Change History :  
1. Update N5 shuttle type naming.