EUROPRACTICE
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European Commission | Horizon 2020 European Union funding for Research & Innovation

2018 General Europractice MPW runs Schedule and Prices

Accessible for universities, research institutes and companies
Version 180312– v3.2

www.europractice-ic.com

Dear customer,

Please note that indicated dates are **gds-in deadlines for TSMC, UMC, XFab, ON Semiconductor, ams technologies**. If you want to participate onto one of below listed shuttles, please make sure to do your design registration in time to ensure a seat is reserved for you. How many weeks in advance is mentioned in the notes per foundry. For questions, you can send a mail to:

For TSMC technologies : eptsmc@imec.be
For UMC technologies : epumc@imec.be
For X-fab technologies : epxfab@imec.be
For ON Semiconductor technologies : greta.milczanowska@imec.be
For ams technologies :
If your service center is imec : ams_support@imec.be
If your service center is fraunhofer : virtual-asic@iis.fraunhofer.de
For IHP technologies : virtual-asic@iis.fraunhofer.de
For GLOBALFOUNDRIES technologies : virtual-asic@iis.fraunhofer.de

ON Semiconductor	J	F	M	A	M	J	J	A	S	O	N	D
ON Semi 0.7µ C07M-D 2M/1P & ON Semi 0.7µ C07M-A 2M/1P/PdiffC/HR	15		26			4		13		29		
ON Semi 0.7µ C07M-I2T100 100 V - 2M & 3M options	15		26			4		13		29		
ON Semi 0.35µ C035U - 4M (3M & 5M optional) only thick top metal	29			16			2		17			3
ON Semi 0.35µ C035 - I3T80U 80 V 4M - 3M optional (5M on special request)	2			2			9			9		
ON Semi 0.35µ C035 - I3T50U 50 V 4M - 3M optional (5M on special request)			5		28				3			3
ON Semi 0.35µ C035 - I3T50U (E) 50 V 4M - 3M optional (5M on special request)			5		28				3			3
ON Semi 0.35µ C035 - I3T25U 3.3/25 V 4M (3M & 5M optional) only thick top metal	29			16			2		17			3
ONC18MS (0.18 µm - 1.8/3.3 V - 15V DMOS - 5LM - MiMC - ESD - HiR - EPI)		5		9		11		15		9		10
ONC18MS-LL (=ONC18MS + High Vt)		5		9		11		15		9		10
ONC18HPA (= ONC18MS + DNW + Zener + Stacked MiMC + Native Dev + Schottky)		5		9		11		15		9		10
ONC18-I4T 45/70V HV CMOS (=ONC18MS + 30V + 45V + 70V DMOS)		5		9		11		15		9		10
ON Semi 0.5µ CMOS EEPROM C5F & C5N – 200 mm			22				26				22	

Important note: Dates are GDS submission deadlines. The design registration has to be done at least 3 weeks in advance.

ams	J	F	M	A	M	J	J	A	S	O	N	D
ams 0.35µ CMOS C35B4C3 4M/2P/HR/5V IO		19			14			6			19	
ams 0.35µ CMOS C35OPTO 4M/2P/5V IO					14						19	
ams 0.35µ HV CMOS H35B4D3 120V 4M		12			2			13		29		
ams 0.35µ SiGe-BiCMOS S35 4M/4P				9				27				10
ams 0.30µ A30B4S3 4M/4P Low VT										29		
ams 0.18µ CMOS aC18 6M/1P/MIM/1.8V/5V					14						19	
ams 0.18µ HV CMOS aH18 50V/20V/5V/1.8V/ 6M/MIM					14						19	
Bottom Anti Reflective Coating (BARC) Diode for ams 0.35µ CMOS C35OPTO 4M/2P/5V IO					14						19	
Wafer Level Chip Scale Package for ams 0.35µ CMOS C35B4C3 4M/2P/HR/5V IO					14						19	

Important notes:
- Dates are GDS submission deadlines. The design registration has to be done at least 2 weeks in advance.
- Customers making use of WLSCP have to send in their design gds file two weeks before the indicated deadline.

Please be aware of extended lead times for the AMS runs. For more information, please contact the support team at amssup@imec.be or virtual-asic@iis.fraunhofer.de
aC18 and aH18 MPW service is limited to ongoing projects and no production on these processes will be supported.

IHP

IHP	J	F	M	A	M	J	J	A	S	O	N	D
IHP SGB25V 0.25µ SiGe:C Ft=75GHz@BVCEO 2.4V	19						27					
IHP SG25H3 0.25µ SiGe:C Ft/Fmax= 110/180GHz 5M/MIM	19						27			19		
IHP SG25H4 0.25µ SiGe:C Ft/Fmax= 200/220GHz 5M/MIM + optional TSV	19						27					
SG25H4_EPIC high performance BiCMOS technology + photonic design layers				6						19		
IHP SG25 PIC (Photonics, Ge Photo-diode, BEOL)					25							
IHP SG13S SiGe:C Bipolar/Analog/CMOS/RF-MEMS Ft/Fmax= 250/300GHz 7M/MIM + optional RF-MEMS or TSV			2					17			23	
IHP SG13C SiGe:C CMOS 7M/MIM			2					17			23	
IHP SG13G2 SiGe:C Bipolar/Analog/Ft/Fmax= 300/500GHz 7M/MIM + optional RF-MEMS			2					17			23	
IHP BEOL SG13 (M1 and Metal Layers Above) +optional RF-MEMS + LBE or TSV		16										

Important notes:

- Dates are registration deadlines after which designs cannot enter this MPW run anymore. Final GDSII file must be submitted within 10 days after this date.
- Bumping available for all IHP technologies with extra charge, limited to 200 bumps.

X-FAB

X-FAB	J	F	M	A	M	J	J	A	S	O	N	D
XH018 0.18µ HV NVM CMOS E-FLASH *	15			23			23			29		
XT018 0.18µ HV SOI CMOS **	02		12		14		9		17			
XS018 0.18µ OPTO***		26						27				

options regular runs	Process modules included for 4 metal option	Process modules included for 6 metal option
XH018 0.18µ HV NVM CMOS E-FLASH	LPMOS, MET3, METMID, MRPOLY, ISOMOS, LVT, DMOS, HVMOS, SCHOTTKY, MIM, NVM, FLASH, OTP3, PHOTODIO	LPMOS, MET3, MET4, METMID, METTHK, MRPOLY, ISOMOS, LVT, DMOS, HVMOS, SCHOTTKY, MIM, NVM, FLASH, OTP3, PHOTODIO
XT018 0.18µ HV SOI CMOS	LP5MOS, HVN, HVP, 1XN, 1XP, PSUB, DTI, DNC, DPC, NBUR, HRPOLY, MIMH, MET3, METTHK, HWC	LP5MOS, HVN, HVP, 1XN, 1XP, PSUB, DTI, DNC, DPC, NBUR, HRPOLY, MIMH, MET3, MET4, METMID, METTHK, HWC
XS018 0.18µ OPTO	MOS3LP, MOSLP, METTHIN, MET3, MET4, MRPOLY, ISOMOS, LVTN3D, BCH, MIM23, PPDB, 4TPIX, SFLATPV	MOS3LP, MOSLP, MET3, MET4, MET5, METMID, MRPOLY, ISOMOS, LVTN3D, BCH, MIM23, PPDB, 4TPIX, SFLATPV

Important note: Dates are GDS submission deadlines. The design registration has to be done at least 2 weeks in advance.

TSMC

TSMC	J	F	M	A	M	J	J	A	S	O	N	D
TSMC 0.18 CMOS Logic or Mixed-Signal/RF, General Purpose	10,22	21,28	28	11,18	2,30	6,27	4,25	8,22	5,26	5,24	7,21	5
TSMC 0.18 CMOS High Voltage BCD Gen II	10	21,28	28	11	2	6,27		1,29	5	3,24		
TSMC 0.13 CMOS Logic or Mixed-Signal/RF, General Purpose or Low Power (8-inch)			7			13			12			
TSMC 0.13 CMOS Logic or Mixed-Signal/RF, General Purpose or Low Power (12-inch)		7		11	9		11	8		10	7	
TSMC 90nm CMOS Logic or Mixed-Signal/RF, General Purpose or Low Power	3			4			4			3		
TSMC 65nm CMOS Logic or Mixed-Signal/RF, General Purpose or Low Power (reserve 4 months in advance)	22	21	28	25	23	27	25	2	26	24	21	
TSMC 40nm CMOS Logic or Mixed-Signal/RF, General Purpose or Low Power (no triple gate oxide)	10	12	13	11	16	13	11	15	12	10	14	
TSMC 28nm CMOS Logic HPL/HPC, RF HPL/HPC (reserve 4 months in advance)	3	7,28		4	2,30		4	1	5	3	7	5

Dates in red are preliminary and can change after TSMC released the schedule for H2 2018.

Important notes:

- Dates are GDS submission deadlines. The design registration has to be done at least 4 weeks in advance unless otherwise specified in above table.
- Contact eptsmc@imec.be if any of the following options are used: MTP/OTP, Deep Trench, High Linearity MiM, Schottky Barrier Diode, ULL N/PMOS

UMC

UMC	J	F	M	A	M	J	J	A	S	O	N	D
UMC L180 Logic GII, Mixed-Mode/RF		12		30			23				5	
UMC L180 EFLASH Logic GII (1)		26					9				12	
UMC CIS180 Image Sensor – CONV/ULTRA diode (1)				9						1		
UMC L130 Logic/Mixed-Mode/RF		19				25					5	
UMC L110AE Logic/Mixed-Mode/RF	8	26		23			2	27		29		3
UMC L65N Logic/Mixed-Mode/RF - LL	2*		5	2*			16* + 30		24*	29		3
UMC L65N Logic/Mixed-Mode/RF - SP	2*		5	2*			16* + 30		24*	29		3
UMC 40N Logic/Mixed-Mode – LP	22	26			21	18		27		22		3
UMC 28N Logic/Mixed-Mode – HPC (1)				2			2			1		

options regular runs	Core	IO	MIM	topmetal	special remarks
UMC L180 Logic GII	1.8V	3.3V	1fF	8kA - Max. 1P6M	Redistribution and bumping on request
UMC L180 Mixed-Mode/RF	1.8V	3.3V	1fF	8kA/20kA Max. 1P6M	Redistribution and bumping on request.
UMC L180 EFLASH logic GII	1.8V	3.3V	/	8kA - Max. 2P6M	Please get in touch with imec for the EEFLASH macro information.
UMC CIS18 – CONV	1.8V	3.3V	1fF	5kA – Max.1P4M	Colorfilters and microlenses included
UMC CIS18 – ULTRA	1.8V	3.3V	1fF	5kA – Max.2P4M	Colorfilters and microlenses included. Ultra diode is pinned. PIP capacitor possible.
UMC L130 Logic	1.2V	3.3V	1fF/1.5fF/2fF	8kA Max. 1P8M2T	Two types (out of 3) of devices can be combined: HS,LL, SP. Redistr. to Al.
UMC L130 Mixed-Mode/RF	1.2V	3.3V	1fF/1.5fF/2fF	8kA/20kA Max. 1P8M2T	Two types (out of 3) of devices can be combined: HS,LL, SP. Redistr. to Al.
UMC L110AE Logic/Mixed-Mode/RF	1.2V	1.8V/2.5V/3.3V/5V	1fF/1.5fF/2fF	8kA/12kA/20kA/40kA Max. 1P8M	Metalization is Aluminium. 5V device possible! HS,LL,SP can be combined.
UMC L65N Logic/Mixed-Mode/RF - SP	1.0V, 1.1V	1.8V/2.5V/ 2.5V_OD3.3V/3.3V	2fF	8kA/32.5kA Max. 1P10M	Metallization recommendation on request. Redistribution to Aluminium. * = 32kA topmetal, LVT, MIM in development. 2.5V_OD3.3V not available. ** = 3.3V not available. Please check with us before tapeout.
UMC L65N Logic/Mixed-Mode/RF - LL	1.2V	1.8V/2.5V/ 2.5V_OD3.3V/3.3V	2fF	8kA/32.5kA Max. 1P10M	Metallization recommendation on request. Redistribution to Aluminium. * = 32kA topmetal in development. Please check with us before tapeout.
UMC 40N Logic/Mixed-Mode - LP	0.9V	1.8V/2.5V	2fF	8kA/12kA/32.5kA	Metallization recommendation on request. Redistribution to Aluminium.
UMC 28N Logic/Mixed-Mode - HPC	1.0 & 1.1V	1.8V/2.5V	2fF	8kA/12kA/32.5kA	Metallization recommendation on request. Redistribution to Aluminium.

Important note: Dates are GDS submission deadlines. The design registration has to be done at least 3 weeks in advance.

(1) Contact Europractice when planning to participate to those runs.

GLOBALFOUNDRIES	J	F	M	A	M	J	J	A	S	O	N	D
GLOBALFOUNDRIES 130nm BCDlite	2		5	30			2		3		5	
GLOBALFOUNDRIES 130 nm LP	2		5	30			2		3		5	
GLOBALFOUNDRIES 55 nm LPe/LPx-NVM/LPx-RF	8		12		14		9		10		12	
GLOBALFOUNDRIES 40 nm LP/LP-RF/RF-mmWave	29			3		4		6		1		3
GLOBALFOUNDRIES 28 nm SLP/SLP-RF		5			2			6			5	
GLOBALFOUNDRIES 22 nm FDSOI	8	12	12	16	14	11	16	13	17	15	12	17

Important note: Dates are registration deadlines after which designs cannot enter this MPW run anymore. Final GDSII file must be submitted within 6 weeks after this date.

Dates in red are preliminary.

MEMSCAP	J	F	M	A	M	J	J	A	S	O	N	D
PolyMUMPS			20			20			18			
SOIMUMPS		20			22			21			27	
PIEZOMUMPS	16				8			28				

ePIXfab-imec	J	F	M	A	M	J	J	A	S	O	N	D
ePIXfab-imec SiPhotonics Passives			27					28				
ePIXfab-imec SiPhotonics iSiPP50G		6			15					16		

* iSiPP50G = advanced passives + Modulator + Detector + LPASS + M2 + edge coupler

ePIXfab-LETI	J	F	M	A	M	J	J	A	S	O	N	D
ePIXfab-LETI SiPhotonics Passives	31								26			
ePIXfab-LETI SiPhotonics Passives with Heater	31								26			

Teledyne Dalsa	J	F	M	A	M	J	J	A	S	O	N	D
Teledyne Dalsa MIDIS					9							

2018 General Europractice MPW runs – Pricelist

Prices are valid for MPW runs starting after 1 January 2018
Accessible for universities, research institutes and companies
Prices and conditions may change at any time without prior notice

STANDARD price : normal price

DISCOUNTED price : only applies to EUROPRACTICE registered (who paid their annual full membership fee) Academic and Research Members from all 28 EU countries and Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Georgia, Iceland, Israel, Liechtenstein, Former Yugoslav Republic of Macedonia, Moldova, Montenegro, Norway, Russia, Switzerland, Turkey, Serbia and Ukraine who submit designs for **educational or publicly funded research use only**
Prices are given for the delivery of unpackaged, untested prototypes. Encapsulation and testing will be charged separately.

Number of prototypes
OnSemi, XFAB : 30 samples
ams: 40 samples
IHP: 40 samples SG25 & SG13, 25 samples using RFMEMS switch module, TSV module, PIC & EPIC
UMC : 0.18um, 0.13um, 0.11um : 50 samples
UMC : 65nm : 90 samples
TSMC : 8-inch : 40 samples, 12-inch : 100 samples
Imec SiPhotonics passives :25 samples, ISIPP50G : 20 samples
miniphotonics : 10 samples
MEMSCAP : 15 samples
GLOBALFOUNDRIES : 50 samples
If you need more prototype samples, please ask for a quotation

Plots
You can order plots/PDF of your designs
- first plot/PDF costs 50 euro
- next plots cost 20 euro each

Packaging : see separate prices and available packages

PRICES IN EURO

ams	STANDARD Price/mm²	DISCOUNTED Price/mm²
ams 0.35µ CMOS C35B4C3 4M/2P/HR/5V IO	640 [3]	580 [3]
ams 0.35µ CMOS C35OPTO 4M/2P/5V IO	800 [3]	700 [3]
ams 0.35µ HV CMOS H35B4D3 120V 4M	880 [3]	800 [3]
ams 0.35µ SiGe-BiCMOS S35 4M/4P	880 [3]	800 [3]
ams 0.30µ A30B4S3 4M/4P Low VT	880 [3]	800 [3]
ams 0.18µ CMOS aC18 6M/1P/MIM/1.8V/5V	1100 [3, 12]	1050 [3, 12]
ams 0.18µ HV CMOS aH18 6M/50V/20V/5V/1.8V/MIM	1150 [3, 12]	1100 [3, 12]
BARC Diode for ams 0.35µ CMOS C35OPTO 4M/2P/5V IO	One-off fee of 13800	One-off fee of 13800
Wafer Level Chip Scale Package for ams 0.35µ CMOS C35B4C3	One-off fee of 6450	One-off fee of 6150

ON Semiconductor (formerly AMIS)	STANDARD Price/mm²	DISCOUNTED Price/mm²
ON Semi 0.7µ C07M-D 2M/1P	300 [2]	270 [2]
ON Semi 0.7µ C07M-A 2M/1P/PdiffC/HR	350 [2]	315 [2]
ON Semi 0.5µ CMOS EEPROM C5F & C5N – 200 mm	1150 [2]	1100 [2]
ON Semi 0.7µ C07M-I2T100 100 V - 2M	525 [1]	485 [1]
ON Semi 0.7µ C07M-I2T100 100 V - 3M	560 [1]	525 [1]
ON Semi 0.35µ C035U 4M (default) including analog options	720 [1]	670 [1]
ON Semi 0.35µ C035U 3M (optional) including analog options	700 [1]	650 [1]
ON Semi 0.35µ C035U 5M (optional) including analog options	800 [1]	750 [1]
ON Semi 0.35µ C035 - I3T80U 80 V 3M	850 [1]	800 [1]
ON Semi 0.35µ C035 - I3T80U 80 V 4M	925 [1]	875 [1]
ON Semi 0.35µ C035 - I3T80U 80 V 5M	1050 [1]	995 [1]
ON Semi 0.35µ C035 - I3T50U (or E) 50 V 3M	850 [1]	800 [1]
ON Semi 0.35µ C035 - I3T50U (or E) 50 V 4M	925 [1]	875 [1]
ON Semi 0.35µ C035 - I3T50U (or E) 50 V 5M	1050 [1]	995 [1]
ON Semi 0.35µ C035 – I3T25U 3.3/25 V 3M (optional)	750 [1]	700 [1]
ON Semi 0.35µ C035 – I3T25U 3.3/25 V 4M (default)	770 [1]	720 [1]
ON Semi 0.35µ C035 – I3T25U 3.3/25 V 5M (optional)	800 [1]	750 [1]
ONC18MS 0.18 µm - 1.8/3.3 V - 15V DMOS - 5LM - MiMC - ESD - HiR - EPI	1,100 [1]	1,050 [1]
ONC18MS-LL (=ONC18MS + High Vt)	1,225 [1]	1,195 [1]
ONC18HPA (= ONC18MS + DNW + Zener + Stacked MiMC + Native Dev + Schottky)	1,350 [1]	1,290 [1]
ON 0.18 µm I4T 40/75 V - 5LM – DTI (=ONC18MS + 30V + 45V + 70V DMOS)	1,540 [1]	1,480 [1]

IHP	STANDARD Price/mm²	DISCOUNTED Price/mm²
IHP SGB25V 0.25µ SiGe:C Ft=75GHz@BVCEO 2.4V	2500 [7]	2125 [7]
IHP SG25H3 0.25µ SiGe:C Ft/Fmax= 110/180GHz 5M/MIM	3800 [7]	3230 [7]
IHP SG25H4 0.25µ SiGe:C Ft/Fmax= 200/220GHz 5M/MIM	4600 [7]	3910 [7]
SG25H_EPIC (based on SG25H4) high performance BiCMOS technology + photonic design layers	6600 [7]	5610 [7]
IHP SG13G2 SiGe:C Bipolar/Analog Ft/Fmax= 300/500GHz 7M/MIM + optional RF-MEMS or TSV	7300 [7]	6205 [7]
IHP SG13S SiGe:C Bipolar/Analog/CMOS Ft/Fmax= 250/300GHz 7M/MIM + optinal RF-MEMS or TSV	6300 [7]	5355 [7]
IHP SG13C SiGe:C CMOS 7M/MIM	4500 [7]	3825 [7]
BEOL SG13 (M1 and Metal Layers Above, for passive structures)	1000 [7]	850 [7]
IHP SG25 PIC (Photonics devices, Ge Photo-diode, BEOL)	3800 [7]	3230 [7]
IHP SPECIAL SERVICES		
bumping (available for all IHP technologies)	One-off fee of 6500 [8]	One-off fee of 6500 [8]
localized back side etching (available for all IHP technologies) not offered for EPIC/PIC runs and RF-MEMS	One-off fee of 5000 [8]	One-off fee of 4250 [8]
RF-MEMS switch for SG13G2 and SG13S (IP)	One-off fee of 10000 [8]	One-off fee of 8500 [8]
TSV to ground (SG25H4/SG13S)	One-off fee of 5000 [8]	One-off fee of 4250 [8]

X-FAB	STANDARD Price/mm2	DISCOUNTED Price/mm²
X-FAB XH018 0.18µ HV NVM CMOS E-FLASH (MET3, METMID)	1430 [1, 10]	1360 [1, 10]
X-FAB XH018 0.18µ HV NVM CMOS E-FLASH (MET3, MET4, METMID, METTHK)	1580 [1, 10]	1505 [1, 10]
X-FAB XT018 0.18µ HV SOI CMOS (MET3, METTHK)	1440 [1, 10]	1365 [1, 10]
X-FAB XT018 0.18µ HV SOI CMOS (MET3, MET4, METMID, METTHK)	1615 [1, 10]	1535 [1, 10]
XS018 0.18µ OPTO (METTHIN, MET3, MET4)	1205 [1, 10]	1145 [1, 10]
XS018 0.18µ OPTO (MET3, MET4, MET5, METMID)	1355 [1, 10]	1290 [1, 10]

TSMC	STANDARD Price/mm²	DISCOUNTED Price/mm²
All TSMC technologies	Upon request [6]	Upon request [6]

UMC	STANDARD Price/block	DISCOUNTED Price/block
UMC L180 Logic GII, Mixed-Mode/RF	14200 [4]	13500 [4]
UMC L180 CIS 2P4M CONV or 2P4M ULTRA	22700 [4]	21580 [4]
UMC L180 EFLASH Logic GII	18000 [4]	17100 [4]
UMC L130 Logic/Mixed-Mode/RF	23650 [4]	22480 [4]
UMC L110AE Logic/Mixed-Mode/RF	26050 [4]	24760 [4]
UMC 65nm Logic, Mixed-Mode/ RF – LL/SP	38600 [5]	36680 [5]
UMC 40N Logic/Mixed-Mode – LP	72700 [5]	69080 [5]
UMC 28N Logic/ Mixed-Mode – HPC	Upon request, please contact EP	

GLOBALFOUNDRIES	STANDARD Price/mm²	DISCOUNTED Price/mm²
GLOBALFOUNDRIES 130 nm BCDlite	1500 [11]	1400 [11]
GLOBALFOUNDRIES 130 nm LP	1500 [11]	1400 [11]
GLOBALFOUNDRIES 55 nm LPe/LPx-NVM/LPx-RF	4000 [11]	3800 [11]
GLOBALFOUNDRIES 40 nm LP/LP-RF/RF-mmWave	5000 [11]	4700 [11]
GLOBALFOUNDRIES 28 nm SLP-RF	10200 [11]	9700 [11]
GLOBALFOUNDRIES 22 nm FDX FDSOI	14000 [11]	13200 [11]

MEMSCAP	STANDARD Price/block	DISCOUNTED Price/block
PolyMUMPS, SOIMUMPS, PIEZOMUMPS – 10x10mm [11]	TBD	TBD

Optional Postprocessing : see pricelist on www.europractice-ic.com

ePIXfab-imec SiPhotonics Passives		Compact dies (die size ~= design size)		Large dies (die = design + cleared perimeter)		Un-diced 200mm wafer	
		STANDARD Price	DISCOUNTED Price	STANDARD Price	DISCOUNTED Price	STANDARD Price	DISCOUNTED Price
Design Size							
2 miniblocks	5.15 x 2,5 mm	3600	3400	6000	5800	6000	5800
1 block	5.15 x 5.15 mm	6800	6500	9200	8900	9200	8900
2 blocks	10.45 x 5.15 mm	12100	11500	14500	13900	14500	13900
Larger sizes		Contact us		Contact us		Contact us	
Options							
25 additional compact dies		+1000	+1000	+1000	+1000	+1000	+1000
25 additional large dies		NA	NA	+2000	+2000	+2000	+2000
1 additional un-diced 200mm wafer		NA	NA	+2000	+2000	+2000	+2000
Cladding	top-oxide	included					
	side-oxide	included		NA		NA	
	resist	included					

ePIXfab-imec SiPhotonics ISSIP50G		STANDARD Price	DISCOUNTED Price
miniPhotonics (10 samples)	2.5 mm x 2.5 mm	10000	9500
	5.15 mm x 2.5 mm	20000	19000
Regular (20 samples)	5.15 mm x 5.15 mm	40000	38000
	10.45 mm x 5.15 mm	80000	76000
	10.45 mm x 10.45 mm	150000	142500
	20 additional dies	+1000	+1000

ePIXfab-LETI SiPhotonics Passives (if not enough designs LETI can cancel the run)		Minimum area : 2 full blocks		Minimum area : 5 full blocks	
		STANDARD Price	DISCOUNTED Price	STANDARD Price	DISCOUNTED Price
Regular	Full : 6.0 x 4.0 mm	4870	4630	3230	3070
	Half : 6.0 x 2.0 mm	2435	2315	1615	1535
Larger sizes		Contact us	Contact us	Contact us	Contact us
Variable dose, metrology, dicing, fabrication report, final resist cladding		Included	Included	Included	Included
Deep rib 65nm		+1765			

ePIXfab-LETI SiPhotonics Passives + heater + metallization for wire bonding compatibility (if not enough designs LETI can cancel the run)		Minimum area : 2 full blocks		Minimum area : 5 full blocks	
		STANDARD Price	DISCOUNTED Price	STANDARD Price	DISCOUNTED Price
miniPhotonics (15 samples)	4.0 x 2.0 mm	9550	9075	NA	NA
	4.0 x 4.0 mm	19100	18145	NA	NA
Regular (25 samples)	Half : 6.0 x 2.0 mm	14325	13610	10750	10215
	Full : 6.0 x 4.0 mm	28650	27220	21500	20425
Larger sizes		Contact us	Contact us	Contact us	Contact us
Variable dose, metrology, dicing, fabrication report, final resist cladding		Included	Included	Included	Included
Deep rib 65nm		+1765			
Passivation opening		+1765			

Teledyne Dalsa (prices only for academia)		STANDARD Price	DISCOUNTED Price
MiDIS	4.0 mm x 4.0 mm	8000 Canadian dollar	NA

Notes

1) Price = area (mm^2) * price/mm^2 with min. fabrication cost equivalent to 10 mm^2
2) Price = area (mm^2) * price/mm^2 with min. fabrication cost equivalent to 5 mm^2
3) Price = area (mm^2) * price/mm^2 with min. fabrication cost equivalent to 7 mm^2
4) Price = per block of 5x5mm needed to fit the design in
5) Price = per block of 4x4mm needed to fit the design in
6) Price can be calculated through http://www.europractice-ic.com/TSMC_request_prices.php
7) Price = area (mm^2) * price/mm^2 with min. fabrication cost equivalent to 0.8 mm^2
8) Price = per submitted design. For bumping (no size limit, limited to 200 bumps) final wafer thickness for TSV is 75um.
9) Cost for extra services like structures release, subdicing, ...
please refer to http://www.europractice-ic.com/MEMS_pricing.php
10) Area will be rounded upwards to the next mm^2 (eg. 12.24 mm^2 will be charged as 13 mm^2)
11) Price = area (mm^2) * price/mm^2 with min. fabrication cost equivalent to 9 mm^2. Any edge length between 1.0 mm to 12.5 mm is possible. The mentioned die size is referred to the Pre-Shrink die size
12) aC18 and aH18 MPW service is limited to ongoing projects and no production on these processes will be supported

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