

실리콘실험실 공정 단가(2020년)

장비명	공정명	Code	B/Size	공정 단가(단위:원)
			(wfs)	
Cleaning	Cleaning DIW	WT01/02	25	50,000
	Cleaning STD1	WT03/04	25	60,000
	Cleaning STD3	WT03/04	25	70,000
	Cleaning SC1	WT03	25	60,000
	Cleaning H2SO4	WT03	25	60,000
	Cleaning 100:1 HF	WT04	25	60,000
	Cleaning 50:1 HF	WT04/05	25	60,000
	Nitride Wet Etch(H3PO4)	WT05	25	150,000
	Wet Etch(Lal 1000, 7:1 BHF)	WT02	25	60,000
	Deglaze	WT02	25	60,000
	Al Etchant	WT05	25	150,000
	Ni Etchant	WT05	1	100,000
	TiW, TiN Wet Etch	WT05	25	100,000
	Furnace	Oxidation($T \leq 1000A$)	FN**	25
Oxidation($1000 < T \leq 5000A$)		FN**	25	350,000
Oxidation($5000 < T \leq 10000A$)		FN**	25	500,000
Drive-In($\leq 2hr$) & Oxidation($< 5000A$)		FN**	25	600,000
Drive-In($> 2hr$) & Oxidation($< 5000A$)		FN**	25	700,000
Drive-In($\leq 2hr$) & Oxidation($\geq 5000A$)		FN**	25	800,000
Drive-In($> 2hr$) & Oxidation($\geq 5000A$)		FN**	25	900,000
Anneal(Time $\leq 1hr$)		FN**	25	150,000
Anneal($1hr < Time \leq 3hr$)		FN**	25	230,000
Anneal($3hr < Time \leq 5hr$)		FN**	25	300,000
Anneal($5hr < Time \leq 7hr$)		FN**	25	370,000
Anneal($7hr < Time \leq 10hr$)		FN**	25	430,000
POCl3 Doping		FN21	25	250,000
Alloy/SOG Curing/Dehydrate		FN11	25	150,000
RTA	RT01	1	60,000	
LPCVD	LP TEOS($T \leq 5000A$)	LP34	25	250,000
	LP TEOS($5000 < T \leq 10000A$)	LP34	25	300,000
	LP TEOS($10000 < T \leq 15000A$)	LP34	25	350,000
	LP Nitride($T \leq 1000A$)	LP33	25	250,000
	LP Nitride($1000 < T \leq 3000A$)	LP33	25	280,000
	LP Nitride($3000 < T \leq 5000A$)	LP33	25	350,000
	LP Poly Si($T \leq 5000A$)	LP32	25	300,000
	LP Poly Si($5000 < T \leq 10000A$)	LP32	25	350,000
	LP Poly Si($10000 < T \leq 15000A$)	LP32	25	400,000
	LP LTO($T \leq 5000A$)	LP31	25	300,000
	LP LTO($5000 < T \leq 10000A$)	LP31	25	350,000
	LP LTO($10000 < T \leq 15000A$)	LP31	25	400,000
	LP HTO, SiON($T \leq 1000A$)	LP24	25	300,000
	LP HTO, SiON($1000 < T \leq 3000A$)	LP24	25	350,000
	SOG($T \leq 5000A$)	SC01	1	200,000
PE OX	PE OX($T \leq 5000A$)	PE02/DR05	1	60,000
	PE OX($5000 < T \leq 10000A$)	PE02/DR05	1	80,000

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PECVD	PE OX(10000<T≤15000A)	PE02/DR05	1	100,000
	PE Nitride(T≤5000A)	PE02/DR05	1	60,000
	PE Nitride(5000<T≤10000A)	PE02/DR05	1	80,000
	PE Nitride(10000<T≤15000A)	PE02/DR05	1	100,000
	SACVD BPSG(T≤5000A)	PE02	1	80,000
	SACVD BPSG(5000<T≤10000A)	PE02	1	100,000
	SACVD BPSG(10000<T≤15000A)	PE02	1	120,000
	PE TEOS(T≤5000A)	PE02	1	60,000
	PE TEOS(5000<T≤10000A)	PE02	1	80,000
	PE TEOS(10000<T≤15000A)	PE02	1	100,000
	PE Oxynitride(T≤5000A)	PE02	1	60,000
	PE Oxynitride(5000<T≤10000A)	PE02	1	80,000
Implant	As, P, BF2, B11 (Dose≥1E15)	IM02	17	600,000
	P, BF2, B11 (Dose≤1E14)	IM01	1	60,000
Dry etch	Nitride(T≤2000A)	DR03	1	60,000
	Nitride(2000<T≤3000A)	DR03	1	90,000
	Nitride(3000<T≤7000A)	DR03	1	110,000
	Poly(T≤3000A)	DR03	1	60,000
	Poly(3000<T≤7000A)	DR03	1	90,000
	Poly(7000<T≤10000A)	DR03	1	110,000
	Oxide(T≤3000A)	DR03/05/06	1	60,000
	Oxide(3000<T≤7000A)	DR03/05/06	1	90,000
	Oxide(7000A<T≤15000A)	DR03/05/06	1	110,000
	Silicon(T≤3000A)	DR03	1	70,000
	Silicon(3000<T≤7000A)	DR03	1	90,000
	Silicon(7000<T≤10000A)	DR03	1	110,000
	Silicon(10000<T≤25000A)	DR03	1	130,000
	Silicon residue remove(T≤500A)	DR03/DR06	1	60,000
	Metal(AlSi T≤10000A)	DR05/06	1	60,000
	Metal(AlSi 10000<T≤20000A)	DR05/06	1	90,000
	Metal(AlSi T>20000A)	DR05/06	1	110,000
	Metal(TiW/AlSi/TiW)	DR05/06	1	100,000
	Metal(Ti/AlSi/TiN)	DR05/06	1	100,000
	TiW, Ti, TiN(T≤1000A)	DR05/06	1	60,000
	Cr(T≤1000A)	DR05/06	1	60,000
	Cr(1000<T≤3000A)	DR05/06	1	90,000
	ITO, NbN, AlN, Mo	DR05/06	1	120,000
	CMP Poly(T≤10000A)	CM01	1	60,000
	CMP Poly(10000<T≤20000A)	CM01	1	90,000
	CMP Poly(20000<T≤30000A)	CM01	1	110,000
	CMP Oxide(T≤10000A)	CM01	1	60,000
	CMP Oxide(10000<T≤20000A)	CM01	1	100,000
	CMP Oxide(20000<T≤30000A)	CM01	1	120,000
	HD etch oxide(T≤3000A)	DR07	1	70,000
HD etch oxide(3000<T≤7000A)	DR07	1	90,000	

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	HD etch oxide(7000<T≤15000A)	DR07	1	110,000
	HD etch Nitride(T≤2000A)	DR07	1	60,000
	HD etch Nitride(2000<T≤7000A)	DR07	1	90,000
	HD Poly(T≤3000A)	DR07	1	60,000
	HD Poly(3000<T≤10000A)	DR07	1	110,000
	HD Silicon(T≤3000A)	DR07	1	60,000
	HD Silicon(3000<T≤7000A)	DR07	1	90,000
	HD Silicon(7000<T≤10000A)	DR07	1	120,000
	HD Silicon(10000<T≤25000A)	DR07	1	150,000
Photo	HMDS/Coat/EBR/Bake(PR PFi389 GA2)	TR01/02	1	20,000
	HMDS/Coat/EBR/Bake(AZ, DNR, others)	TR01/02	1	25,000
	HMDS, EBR, Bake(Hot Plate)	TR01/02	1	15,000
	Exposure(i-line Stepper)	ST02,3	1	25,000
	Exposure(Projection Aligner)	PA01	1	25,000
	Exposure(Contact Aligner)	CA01	1	25,000
	PEB/Develop(time≤90sec)	TR01/02	1	20,000
	PEB/Develop(90<time≤180sec)	TR01/02	1	25,000
	PEB/Develop(180<time≤270sec)	TR01/02	1	35,000
	Bake Hard	OV03	25	20,000
	Solvent Strip	WT01	25	100,000
Sputtering	TiW(T≤3000A)	SP03	1	50,000
	TiW(3000<T≤5000A)	SP03	1	60,000
	Ni, Cr, Si(T≤500A)	SP01	1	40,000
	Ni, Cr, Si(500<T≤1000A)	SP01	1	60,000
	Ni, Cr, Si(1000<T≤3000A)	SP01	1	80,000
	Ti(T≤500A)	SP02	1	40,000
	Ti(500<T≤1000A)	SP02	1	60,000
	Ti(1000<T≤3000A)	SP02	1	80,000
	TiN(T≤500A)	SP02	1	40,000
	TiN(500<T≤1000A)	SP02	1	60,000
	TiN(1000<T≤3000A)	SP02	1	80,000
	Al(T≤5000A)	SP01/02/03	1	40,000
	Al(5000<T≤10000A)	SP01/02/03	1	60,000
	Al(10000<T≤20000A)	SP01/02/03	1	80,000
	NbN, AlN	SP02	1	100,000
	Mo	SP01	1	70,000
	RF Etch	SP02	1	50,000
	Alloy	SP02	1	60,000
	Ti, Ni, Al(100<T≤1000A)	EP01	5	100,000
	Ti, Ni, Al(1000<T≤3000A)	EP01	5	120,000
Ag(100<T≤5000A)	EP01	5	150,000	
Ag(5000<T≤10000A)	EP01	5	200,000	
PR Strip	Dry Strip1	PS01/PS03	25	60,000
	Dry Strip3	DR05/06	1	10,000
	Acid	WT02	25	60,000

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			(wfs)	
	Descum	DR03/PS02	1	10,000
	Micro-Wave Strip	PS02	1	10,000
Measure & ETC	CD Measure	CD	1	50,000
	Rs Measure	4-P	1	10,000
	Inspection	Scope	1	10,000
	Film Thickness	NS02	1	20,000
	Refractive Index	Prism Coupler	1	20,000
	Laser Marking	LM01	1	5,000
	Electrical Characteristics		1hr	150,000
	Mask Tooling		1hr	100,000
	Simulation(Process & Device)		1hr	100,000
	Flexible Display	LLO Process	LL01	1hr
R2R Film Dep		RR01	1hr	155,300
Encapsulation Process			OMO 1회	500,000
(1) 단가표에 없는 공정 단가는 외삽법에 의함				
(2) 기본료 100,000원 건마다 적용(양산 계약 건은 제외)				
(3) CD Measure 장비 사용 단가는 매 30min 초과 시 1장(기준 시간 30분)씩 계상하는 방식				
(4) 연구원이 직접 수행하거나, 개발이 필요한 공정의 단가는 별도 협의함(공정 단가의 300%이내)				
(5) 양산의 경우는 협의 후 할인을 적용(계약 volume에 따른 할인율 협의)				