

Year of Production	Near-Term									Long-Term						
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
DRAM ½ Pitch (nm) (contacted)	80	70	65	57	50	45	40	35	32	28	25	22	20	18	16	14
	85	76	67	60	54	48	42	38	34	30	27	24	21	19	17	15
Number of terminals – low cost hand-held	600	600	700	800	800	800	800	800	800	800	800	800	800	800	800	800
Number of terminals – high performance (digital)		2900	3050	3190	3350	3509	3684	3860	4053	4246	4458	4670	4904	5138	5394	5651
Number of terminals—maximum RF	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
Low cost handheld / #die / stack	6	6	7	8	9	10	11	12	13	14	14	15	15	16	16	17
High performance / die / stack	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7
Low cost handheld / #die / SiP	6	8	8	8	9	11	12	13	14	14	14	15	15	16	16	17
High performance / #die / SiP	4	5	6	6	6	7	7	7	8	8	8	9	9	9	10	10
Minimum component size (microns)	1005	1005	1005	600x300	600x300	400x200	400x200	400x200	200x100	200x100	200x100	200x100	200x100	200x100	200x100	200x100
Maximum reflow temperature (°C)	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260

