

TABLE 19
Companies with domestic R&D paid for by the company and others and performed by the company in the software products and embedded software technology focus area, by industry and company size: 2017

(Millions of U.S. dollars)

Industry and company size	NAICS code	Software products and embedded software R&D										
		Domestic R&D		Total		Paid for by the company		Paid for by others				
		Companies ^a (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount	Total		Federally funded		
								Companies ^b (number)	Amount	Companies ^b (number)	Amount	
All industries	21-23, 31-33, 42-81	20,884	400,100	8,367	i 140,452	7,835	i 130,015	1,030	10,437	548	5,212	i
Manufacturing industries	31-33	12,151	257,227	3,623	i 36,804	3,493	i 32,084	350	4,719	60	3,140	i
Food	311	563	4,697	i 20	16	19	12	D	4	0	0	
Chemicals	325	1,840	74,977	121	451	114	372	16	79	i 11	4	
Basic chemicals	3251	269	2,574	10	9	10	9	0	0	0	0	
Pharmaceuticals and medicines	3254	841	66,202	47	214	41	149	13	66	i D	3	
Other chemicals	other 325	731	6,202	64	i 227	i 63	i 214	3	13	D	*	i
Plastics and rubber products	326	638	3,754	85	i 55	85	i 55	0	0	0	0	
Nonmetallic mineral products	327	193	1,334	15	i 24	i 15	i 24	0	0	0	0	
Fabricated metal products	332	1,260	2,206	254	i 152	223	i 149	D	3	0	0	
Machinery	333	1,793	13,197	610	i 1,264	603	i 1,196	18	68	D	1 - 21	
Agricultural implement	33311	183	1,570	42	i 255	42	i 253	D	2	D	2	
Semiconductor machinery	333242	39	3,694	16	82	14	62	i 3	20	D	0 - 19	i
Engine, turbine, and power transmission equipment	3336	120	2,080	37	i 221	i D	174 - 222	i D	0 - 48	D	0 - 19	
Other machinery	other 333	1,452	5,853	515	i 705	D	658 - 706	D	0 - 48	i D	0 - 19	i
Computer and electronic products	334	1,793	78,575	1,261	i 25,571	i 1,224	i 23,593	166	i 1,978	28	1,181	i
Semiconductor and other electronic components	3344	471	30,148	243	i 6,402	i 225	i 6,161	44	i 241	i D	25	
Other electronic products	other 334	1,322	48,427	1,018	i 19,169	998	i 17,432	122	1,737	D	1,156	i
Electrical equipment, appliances, and components	335	731	4,291	443	i 811	i 433	i 797	30	i 14	D	1	
Transportation equipment	336	844	53,292	268	i 5,994	i 251	i 3,468	44	2,525	i 12	1,936	i
Automobiles, bodies, trailers, and parts	3361-63	396	23,881	87	i 1,733	72	1,506	31	228	D	0 - 228	
Other transportation	other 336	449	29,410	181	i 4,260	i 179	i 1,963	13	2,298	i D	1,707 - 1,937	i
Miscellaneous manufacturing	339	1,428	15,695	397	i 2,243	379	2,204	40	i 38	D	0 - 19	
Other manufacturing	312-16, 321-24, 331, 337	1,078	5,209	148	i 224	147	215	D	8	D	0 - 9	
Nonmanufacturing industries	21-23, 42-81	8,736	142,874	4,744	i 103,648	4,342	i 97,931	680	5,718	488	2,072	

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50-99	-	3,806	10,141	1,509	i	3,098	1,387	i	2,438	191	660	108	312
100-249	-	3,176	17,216	1,137		4,820	1,056		3,819	132	1,001	70	490
Large companies													
250-499	-	1,475	14,103	478		4,512	455		4,056	48	456	17	77
500-999	-	939	17,871	345		6,716	336		6,572	25	144	7	13
1,000-4,999	-	984	65,112	427		22,861	413		21,299	45	1,561	11	703
5,000-9,999	-	206	40,198	95		15,921	91		14,485	14	1,435	4	86
10,000-24,999	-	154	73,485	79		20,374	i	75	18,848	i	1,525	i	725
25,000 or more	-	105	149,227	53		58,206	51		55,229	12	2,977	i	7
													2,445

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

^a Statistics for the number of companies are based only on companies in the United States that reported to the survey. These statistics do not include an adjustment to the weight to account for unit nonresponse. A company having multiple reporting parts for data collection may contribute to the statistics for multiple industries, so the detail may not add to the total for the number of companies.

^b Statistics for the number of companies are based only on companies in the United States that reported to the survey. These statistics do not include an adjustment to the weight to account for unit nonresponse. These company count estimates reflect a new imputation process implemented for survey year 2014. This change has affected the comparability of these company count estimates with estimates published for years prior to 2014. A company having multiple reporting parts for data collection may contribute to the statistics for multiple industries, so the detail may not add to the total for the number of companies.

^c Business Research and Development Survey does not include companies with fewer than 10 domestic employees.

Note(s)

Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded R&D. Companies could report R&D in one, more than one, or no application area. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s)

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2017.