

TABLE 47. Companies with domestic R&D paid for and performed by the company in selected technology focus areas, by industry and company size: 2011
(Millions of U.S. dollars)

Industry and company size	NAICS code	Domestic R&D		Software products		Embedded software		Biotechnology		Nanotechnology	
		Companies ^a (number)	Amount	Companies ^a (number)	Amount	Companies ^a (number)	Amount	Companies ^a (number)	Amount	Companies ^a (number)	Amount
All industries	21-23, 31-33, 42-81	47,662	238,768	19,875	55,273	13,326	21,596	5,746	20,336 i	3,960	11,613 i
Manufacturing industries	31-33	22,195	163,340	4,575	10,505	4,860	12,877	2,009	16,720 i	2,106	10,085 i
Food	311	1,541	4,204	58	9	104	14	206	353 i	18	3 i
Chemicals	325	2,488	49,988	263	156	173	773	592	15,027 i	404	516 i
Basic chemicals	3251	499	3,674	7	9	8	18	114	408 i	177	172 i
Pharmaceuticals and medicines	3254	610	41,111	44	94	82	702	334	14,127 i	79	216 i
Other chemicals	other 325	1,379	5,202	212	53	84	53	144	492 i	147	128 i
Plastics and rubber products	326	1,416	1,973	177	42	43	7	144	47 i	168	40
Nonmetallic mineral products	327	D	1,145	28	5	35	3	14	5 i	59	51 i
Fabricated metal products	332	2,422	1,738	497	62	402	41	9	2 i	303	61
Machinery	333	D	13,578	841	466	1,017	1,303	129	73	175	1,107 i
Agricultural implement	33311	171	1,255	28	47	33	86	D	*	D	*
Semiconductor machinery	333295	51	2,220	12	12 i	27	54	8	7 i	25	1,048 i
Engine, turbine, and power transmission equipment	3336	196	3,599	90	137	104	417	D	D	23	D
Other machinery	other 333	D	6,503	711	269	853	746	D	D	D	D
Computer and electronic products	334	3,098	53,664	1,228	8,434	1,498	9,076	225	411 i	467	8,045 i
Semiconductor and other electronic components	3344	777	22,855	206	2,633	239	2,422	38	45 i	175	7,377 i
Other computer and electronic products	other 334	2,321	30,809	1,022	5,801	1,259	6,654	187	366 i	293	668 i
Electrical equipment, appliances, and components	335	1,277	3,417	419	131	631	239	105	38 i	107	69
Transportation equipment	336	1,382	20,275	274	479	206	685	40	32 i	22	31 i
Motor vehicles, bodies, trailers, and parts	3361, 3362, 3363	729	11,737	133	39	106	292	D	D	4	11 i
Other transportation equipment	other 336	653	8,538	141	440	100	393	D	D	18	20 i
Miscellaneous manufacturing	339	2,275	8,442	437	564 i	485	593	415	509 i	147	55 i
Other manufacturing	312-316, 321-324, 331, 337	2,583	4,918	354	155	266	142	131	223 i	236	106
Nonmanufacturing industries	21-23, 42-81	25,467	75,428	15,299	44,768	8,466	8,719	3,737	3,616	1,854	1,528 i
Mining, extraction, and support activities	21	185	2,425	39	191	39	118	24	67 i	7	16 i
Utilities	22	74	302	13	34	14	30	19	10 i	5	*
Wholesale trade	42	3,605	1,419 i	1,173	90 i	829	148 i	326	50 i	19	26 i
Information	51	4,022	41,014	3,204	30,942	1,444	4,526	57	38 i	24	1,061 i
Publishing	511	2,038	27,748	1,547	20,685	729	3,049	52	37 i	D	1,061 i
Telecommunications	517	D	2,040	141	952 i	123	624 i	0	0	D	*
Data processing, hosting, and related services	518	D	4,257	942	3,695	187	358 i	D	*	0	0
Other information	other 51	761	6,969	574	5,609	405	494	D	*	0	0
Professional, scientific, and technical services	54	10,670	23,368	7,463	9,946 i	4,543	2,595	2,217	3,270	1,750	409 i
Architectural, engineering, and related services	5413	2,150	1,808	886	335	985	217	330	116	269	39
Scientific research and development services	5417	1,534	6,170	365	148 i	392	140	888	3,065	472	188 i
Biotechnology research and development	541711	671	4,283	90	45 i	89	36 i	563	2,797	180	68 i
Other scientific research and development	other 5417	863	1,888	275	102	303	104	324	268 i	292	120 i
Other professional, scientific, and technical services	other 54	6,987	15,389	6,212	9,463 i	3,166	2,238	999	88 i	1,009	182
Health care services	621-23	1,009	558	588	53	584	65	303	161 i	10	9 i
Other nonmanufacturing	23, 44-45, 48-49, 52-53, 55-56, 624, 71-72, 81	5,902	6,342	2,819	3,514	1,014	1,237	791	21	39	7 i

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		Companies ^a (number)	Amount	Companies ^a (number)	Amount	Companies ^a (number)	Amount	Companies ^a (number)	Amount	Companies ^a (number)	Amount
All companies (number of domestic employees)	-	47,662	238,768	19,875	55,273	13,326	21,596	5,746	20,336 i	3,960	11,613 i
Small companies ^b											
5-499	--	45,120	46,509	18,981	14,185	12,619	5,198	5,378	5,810	3,627	1,486 i
5-99	--	38,331	24,928	16,413	8,331	11,032	3,314	4,637	3,410	3,012	698
5-49	-	33,145	17,317	14,308	6,264	9,484	2,604	3,922	2,130	2,533	550
5-9	-	11,510	2,981	5,386	740 i	4,034	913	1,186	356	665	50
10-24	-	12,931	4,907	5,583	1,470	3,140	441	1,404	705	1,201	155
25-49	-	8,704	9,429	3,339	4,053	2,310	1,250	1,332	1,068	668	345
50-99	-	5,186	7,611	2,106	2,067	1,548	710	716	1,280	479	148
100-249	-	4,568	10,433	1,525	2,303	1,243	1,020	560	1,373 i	489	544 i
250-499	-	2,220	11,149	1,043	3,552	345	863	180	1,027 i	126	244 i
Medium and large companies											
500-999	-	D	8,739	265	2,230	183	947	101	791	76	245 i
1,000-4,999	-	1,232	42,905	397	9,363	323	3,126	125	3,918 i	126	1,219 i
5,000-9,999	-	235	18,659	123	3,860	83	2,537	84	1,050 i	79	1,819 i
10,000-24,999	-	138	42,585	54	8,847	60	2,943	33	5,847 i	30	3,436 i
25,000 or more	-	D	79,370	55	16,788	57	6,845	25	2,920 i	22	3,408 i

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

NAICS = 2007 North American Industry Classification System.

^a Statistics for 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.

^b Upper bound based on U.S. Small Business Administration's definition of a small business; Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

NOTES: Detail may not add to total because of rounding. Industry classification based on dominant business code for domestic R&D performance where available. For companies that did not report business codes, classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded R&D.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics and U.S. Census Bureau, Business R&D and Innovation Survey, 2011.