

TABLE 48. Companies with domestic R&D paid for by others 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	8,639	55,324	3,207	5,028	2,488	3,334	1,628	5,205	1,461	1,943
Manufacturing industries	31-33	2,545	38,021	661	2,255	739	1,639	461	3,099 i	442	1,431
Food	311	112	196	10	2	10	2	79	22	0	0
Chemicals	325	392	5,337	D	2	15	2	134	2,805 i	148	37
Basic chemicals	3251	149	D	D	2	12	1	19	10	124	19
Pharmaceuticals and medicines	3254	168	4,838	D	*	3	1	100	2,696 i	3	1 i
Other chemicals	other 325	75	D	D	*	0	0	15	100	21	17
Plastics and rubber products	326	147	307 i	D	*	D	*	D	*	20	3 i
Nonmetallic mineral products	327	13	33	0	0	0	0	D	*	4	5
Fabricated metal products	332	335	115	126	3 i	95	1 i	D	* i	D	1
Machinery	333	199	1,131	95	152	94	15	8	11 i	14	102
Agricultural implement	33311	5	22	3	2 i	3	4	0	0	D	2
Semiconductor machinery	333295	14	139	8	4 i	9	2	D	1	10	100
Engine, turbine, and power transmission equipment	3336	17	693	9	D	D	D	0	0	0	0
Other machinery	other 333	163	278	75	D	D	D	D	10 i	D	*
Computer and electronic products	334	615	9,040	230	1,219	333	893	101	82 i	186	1,088
Semiconductor and other electronic components	3344	255	1,245	58	60 i	85	24 i	4	D	61	634 i
Other computer and electronic products	other 334	360	7,794	172	1,159	248	869	98	D	125	454
Electrical equipment, appliances, and components	335	99	178	38	11	51	53	17	17	D	*
Transportation equipment	336	172	20,605 i	68	824 i	78	627 i	D	D	21	164 i
Motor vehicles, bodies, trailers, and parts	3361, 3362, 3363	103	D	33	69 i	36	62	D	*	D	*
Other transportation equipment	other 336	70	D	35	755 i	42	565 i	D	D	D	164 i
Miscellaneous manufacturing	339	308	D	61	38	51	41	88	97	34	19
Other manufacturing	312-316, 321-324, 331, 337	153	D	D	4 i	D	6	D	D	10	11
Nonmanufacturing industries	21-23, 42-81	6,093	17,303	2,546	2,773	1,748	1,695 i	1,168	2,106	1,018	513 i
Mining, extraction, and support activities	21	41	307	28	D	28	D	0	0	D	3
Utilities	22	23	84	D	*	15	3 i	0	0	15	1 i
Wholesale trade	42	612	248	122	54 i	126	59 i	D	8	123	13 i
Information	51	146	851	126	430	60	107	D	2	4	D
Publishing	511	D	687	66	386	23	73	0	0	D	D
Telecommunications	517	9	117	4	3	4	30	0	0	0	0
Data processing, hosting, and related services	518	35	28	D	23	D	2	0	0	0	0
Other information	other 51	D	19	D	17 i	D	2	D	2	D	*
Professional, scientific, and technical services	54	3,800	14,851	2,007	2,104	1,508	1,456 i	770	2,050	615	464 i
Architectural, engineering, and related services	5413	1,152	1,966	461	208 i	512	409 i	42	5	74	20
Scientific research and development services	5417	1,357	9,131	472	853 i	414	572 i	710	1,968	525	404 i
Biotechnology research and development	541711	372	1,735	109	43 i	10	25	342	1,238	115	26
Other scientific research and development	other 5417	985	7,396	363	810 i	403	547 i	368	730 i	410	378 i
Other professional, scientific, and technical services	other 54	1,290	3,755	1,074	1,043	583	475 i	19	78 i	16	40 i
Health care services	621-23	620	183	D	*	D	*	291	36	5	D
Other nonmanufacturing	23, 44-45, 48-49, 52-53, 55-56, 624, 71-72, 81	852	779	D	D	D	D	D	8	D	D

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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)	-	8,639	55,324	3,207	5,028	2,488	3,334	1,628	5,205	1,461	1,943
Small companies ^b											
5-499	-	8,206	10,283	3,063	1,584	2,334	1,258	1,536	1,554	1,371	541
5-99	-	6,813	6,382	2,576	1,074	2,106	948	1,409	1,049	1,045	396
5-49	-	6,198	4,525	2,333	788	1,911	696	1,258	732	920	305
5-9	-	2,262	1,221	872	279	672	177	411	151	260	78
10-24	-	2,384	1,872	956	360	755	272	606	326	308	149
25-49	-	1,552	1,432	505	149 i	484	248	240	255	353	79
50-99	-	615	1,857	242	286 i	195	252	151	316	125	91 i
100-249	-	820	2,095	195	245	185	214	96	367	54	116
250-499	-	573	1,806	293	264	43	96	31	138	272	29 i
Medium and large companies											
500-999	-	126	1,288	35	70 i	34	131	26	205	19	30 i
1,000-4,999	-	170	7,579	54	687	59	375	32	1,223	36	676
5,000-9,999	-	46	6,292	15	700	19	166 i	9	1,414 i	10	317
10,000-24,999	-	51	6,630	20	585	22	610	12	620 i	13	44 i
25,000 or more	-	40	23,253 i	20	1,401 i	20	793 i	13	189 i	12	336 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.