Form 5500

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Annual Return/Report of Employee Benefit Plan

This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code).

▶ **Complete all entries in accordance with the instructions to the Form 5500.**

OMB Nos. 1210-0110
1210-0089

2016

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A This return/report is for:
- ☐ a multiemployer plan
- ☐ a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)
- ☒ a single-employer plan
- ☐ a DFE (specify) ____

B This return/report is:
- ☐ the first return/report
- ☐ the final return/report
- ☐ an amended return/report
- ☐ a short plan year return/report (less than 12 months)

C If the plan is a collectively-bargained plan, check here. . . . . ▶ ☐

D Check box if filing under:
- ☒ Form 5558
- ☐ automatic extension
- ☐ the DFVC program
- ☐ special extension (enter description)

Part II Basic Plan Information—enter all requested information

1a Name of plan
IDERA 401(K) SAVINGS PLAN

1b Three-digit plan number (PN) ▶ 001

1c Effective date of plan 01/01/2002

2a Plan sponsor's name (employer, if for a single-employer plan)
Mailing address (include room, apt., suite no. and street, or P.O. Box)
City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions)
IDERA, INC.

2950 N LOOP FWY WEST
SUITE 700
HOUSTON, TX 77092

2b Employer Identification Number (EIN)
76-0662481

2c Plan Sponsor's telephone number
713-533-6060

2d Business code (see instructions)
541519

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	07/27/2017	LAURIE CRAWFORD
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE			
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

Preparer's name (including firm name, if applicable) and address (include room or suite number)

Preparer's telephone number

3a Plan administrator's name and address [X] Same as Plan Sponsor	**3b** Administrator's EIN	
	3c Administrator's telephone number	
4 If the name and/or EIN of the plan sponsor has changed since the last return/report filed for this plan, enter the name, EIN and the plan number from the last return/report:	**4b** EIN	
a Sponsor's name	**4c** PN	

5 Total number of participants at the beginning of the plan year	**5**	210
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines **6a(1), 6a(2), 6b, 6c,** and **6d**).		
a(1) Total number of active participants at the beginning of the plan year	**6a(1)**	132
a(2) Total number of active participants at the end of the plan year	**6a(2)**	231
b Retired or separated participants receiving benefits	**6b**	1
c Other retired or separated participants entitled to future benefits	**6c**	143
d Subtotal. Add lines **6a(2)**, **6b**, and **6c**.	**6d**	375
e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.	**6e**	0
f Total. Add lines **6d** and **6e**.	**6f**	375
g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	**6g**	351
h Number of participants that terminated employment during the plan year with accrued benefits that were less than 100% vested	**6h**	2
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item)	**7**	

8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:

2G 2J 2K 2S 2T 3D 2F

b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:

9a Plan funding arrangement (check all that apply)		**9b** Plan benefit arrangement (check all that apply)	
(1)	[ ] Insurance	**(1)**	[ ] Insurance
(2)	[ ] Code section 412(e)(3) insurance contracts	**(2)**	[ ] Code section 412(e)(3) insurance contracts
(3)	[X] Trust	**(3)**	[X] Trust
(4)	[ ] General assets of the sponsor	**(4)**	[ ] General assets of the sponsor

10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)

a Pension Schedules

- **(1)** [X] **R** (Retirement Plan Information)
- **(2)** [ ] **MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary
- **(3)** [ ] **SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary

b General Schedules

- **(1)** [X] **H** (Financial Information)
- **(2)** [ ] **I** (Financial Information – Small Plan)
- **(3)** [ ] **A** (Insurance Information) ___
- **(4)** [X] **C** (Service Provider Information)
- **(5)** [ ] **D** (DFE/Participating Plan Information)
- **(6)** [ ] **G** (Financial Transaction Schedules)

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ..... ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ..... ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2016 Form M-1 annual report. If the plan was not required to file the 2016 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code_____

SCHEDULE C (Form 5500)	Service Provider Information	OMB No. 1210-0110
Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ **File as an attachment to Form 5500.**	**2016** **This Form is Open to Public Inspection.**

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A Name of plan	**B** Three-digit plan number (PN) ▶	
IDERA 401(K) SAVINGS PLAN		001
C Plan sponsor's name as shown on line 2a of Form 5500	**D** Employer Identification Number (EIN)	
IDERA, INC.	76-0662481	

Part I Service Provider Information (see instructions)

You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1 Information on Persons Receiving Only Eligible Indirect Compensation

a Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions).. . . . . [X] Yes [ ] No

b If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

FIDELITY INVESTMENTS INSTITUTIONAL

04-2647786

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

RAYMOND JAMES FINANCIAL SERVICES I

52-2114207

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27	ADVISOR	53392	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

FIDELITY INVESTMENTS INSTITUTIONAL

04-2647786

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
37 60 64 65	RECORDKEEPER	-7922	Yes [X] No [ ]	Yes [X] No [ ]	0	Yes [X] No [ ]

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes [ ] No [ ]	Yes [ ] No [ ]		Yes [ ] No [ ]

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	**(c)** Relationship to employer, employee organization, or person known to be a party-in-interest	**(d)** Enter direct compensation paid by the plan. If none, enter -0-.	**(e)** Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	**(f)** Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	**(g)** Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	**(h)** Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	**(c)** Relationship to employer, employee organization, or person known to be a party-in-interest	**(d)** Enter direct compensation paid by the plan. If none, enter -0-.	**(e)** Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	**(f)** Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	**(g)** Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	**(h)** Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	**(c)** Relationship to employer, employee organization, or person known to be a party-in-interest	**(d)** Enter direct compensation paid by the plan. If none, enter -0-.	**(e)** Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	**(f)** Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	**(g)** Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	**(h)** Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
FIDELITY INVESTMENTS INSTITUTIONAL	60	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
AMCENT INFL ADJBD IS - AMERICAN CE 44-0619208	0.05%

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
FIDELITY INVESTMENTS INSTITUTIONAL	60	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
BLKRK GLOBAL ALLOC I - BNY MELLON P.O. BOX 9793 PROVIDENCE, RI 02940	0.25%

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
FIDELITY INVESTMENTS INSTITUTIONAL	60	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
BLKRK HI YLD BD INST - BNY MELLON P.O. BOX 9793 PROVIDENCE, RI 02940	0.25%

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
FIDELITY INVESTMENTS INSTITUTIONAL	60	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
DREY OP MIDCAP VAL I - DREYFUS TRA 200 PARK AVENUE NEW YORK, NY 10166	0.35%

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
FIDELITY INVESTMENTS INSTITUTIONAL	60	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
DREY STRCT MIDCAP I - DREYFUS TRAN 200 PARK AVENUE NEW YORK, NY 10166	0.35%

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
FIDELITY INVESTMENTS INSTITUTIONAL	60	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
FED INTL LEADERS IS - STATE STREET 04-0025081	0.35%

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
FIDELITY INVESTMENTS INSTITUTIONAL	60	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
FKLN NAT RESRC ADV - FRANKLIN TEMP 94-3167260	0.25%

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
FIDELITY INVESTMENTS INSTITUTIONAL	60	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
JANUS ENTERPRISE I - JANUS SERVICE 43-1804048	0.10%

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
FIDELITY INVESTMENTS INSTITUTIONAL	60	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
JPM SM CAP CORE R5 - BOSTON FINANC 330 W. 9TH STREET KANSAS CITY, MO 66160	0.25%

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
FIDELITY INVESTMENTS INSTITUTIONAL	60	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
TEMPLETON FOREIGN AD - FRANKLIN TE 94-3167260	0.25%

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
FIDELITY INVESTMENTS INSTITUTIONAL	60	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
TMPL GLOBAL BOND ADV - FRANKLIN TE 94-3167260	0.25%

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

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(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)

(complete as many entries as needed)

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

SCHEDULE H (Form 5500)

Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Financial Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2016

This Form is Open to Public Inspection

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A Name of plan
IDERA 401(K) SAVINGS PLAN

B Three-digit plan number (PN) ▶ 001

C Plan sponsor's name as shown on line 2a of Form 5500
IDERA, INC.

D Employer Identification Number (EIN)
76-0662481

Part I Asset and Liability Statement

1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. **Round off amounts to the nearest dollar.** MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.

Assets		(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash	1a	0	0
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions	1b(1)	0	0
(2) Participant contributions	1b(2)	0	0
(3) Other	1b(3)	0	0
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit)	1c(1)	162299	405383
(2) U.S. Government securities	1c(2)	0	0
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred	1c(3)(A)	0	0
(B) All other	1c(3)(B)	0	0
(4) Corporate stocks (other than employer securities):			
(A) Preferred	1c(4)(A)	0	0
(B) Common	1c(4)(B)	0	0
(5) Partnership/joint venture interests	1c(5)	0	0
(6) Real estate (other than employer real property)	1c(6)	0	0
(7) Loans (other than to participants)	1c(7)	0	0
(8) Participant loans	1c(8)	57323	80907
(9) Value of interest in common/collective trusts	1c(9)	0	0
(10) Value of interest in pooled separate accounts	1c(10)	0	0
(11) Value of interest in master trust investment accounts	1c(11)	0	0
(12) Value of interest in 103-12 investment entities	1c(12)	0	0
(13) Value of interest in registered investment companies (e.g., mutual funds)	1c(13)	6321081	18502394
(14) Value of funds held in insurance company general account (unallocated contracts)	1c(14)		
(15) Other	1c(15)	0	0

			(a) Beginning of Year	(b) End of Year
1d	Employer-related investments:			
	(1) Employer securities	1d(1)	0	0
	(2) Employer real property	1d(2)	0	0
e	Buildings and other property used in plan operation	1e	0	0
f	Total assets (add all amounts in lines 1a through 1e)	1f	6540703	18988684
	Liabilities			
g	Benefit claims payable	1g	0	0
h	Operating payables	1h	0	0
i	Acquisition indebtedness	1i	0	0
j	Other liabilities	1j	0	0
k	Total liabilities (add all amounts in lines 1g through1j)	1k	0	0
	Net Assets			
l	Net assets (subtract line 1k from line 1f)	1l	6540703	18988684

Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

	Income		(a) Amount	(b) Total
a	**Contributions:**			
	(1) Received or receivable in cash from: **(A)** Employers	2a(1)(A)	6996	
	(B) Participants	2a(1)(B)	1444416	
	(C) Others (including rollovers)	2a(1)(C)	126302	
	(2) Noncash contributions	2a(2)	0	
	(3) Total contributions. Add lines **2a(1)(A), (B), (C),** and line **2a(2)**	2a(3)		1577714
b	**Earnings on investments:**			
	(1) Interest:			
	(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)	166	
	(B) U.S. Government securities	2b(1)(B)	0	
	(C) Corporate debt instruments	2b(1)(C)	0	
	(D) Loans (other than to participants)	2b(1)(D)	0	
	(E) Participant loans	2b(1)(E)	3225	
	(F) Other	2b(1)(F)	0	
	(G) Total interest. Add lines **2b(1)(A)** through **(F)**	2b(1)(G)		3391
	(2) Dividends: **(A)** Preferred stock	2b(2)(A)	0	
	(B) Common stock	2b(2)(B)	0	
	(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)	799139	
	(D) Total dividends. Add lines **2b(2)(A)**, **(B)**, and **(C)**	2b(2)(D)		799139
	(3) Rents	2b(3)		0
	(4) Net gain (loss) on sale of assets: **(A)** Aggregate proceeds	2b(4)(A)	0	
	(B) Aggregate carrying amount (see instructions)	2b(4)(B)	0	
	(C) Subtract line **2b(4)(B)** from line **2b(4)(A)** and enter result	2b(4)(C)		0
	(5) Unrealized appreciation (depreciation) of assets: **(A)** Real estate	2b(5)(A)	0	
	(B) Other	2b(5)(B)	0	
	(C) Total unrealized appreciation of assets. Add lines **2b(5)(A)** and **(B)**	2b(5)(C)		0

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts	2b(6)		0
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		0
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		0
(9) Net investment gain (loss) from 103-12 investment entities	2b(9)		0
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		1932399
c Other income	2c		0
d Total income. Add all **income** amounts in column (b) and enter total	2d		4312643
Expenses			
e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	5122855	
(2) To insurance carriers for the provision of benefits	2e(2)	0	
(3) Other	2e(3)	0	
(4) Total benefit payments. Add lines **2e(1)** through **(3)**	2e(4)		5122855
f Corrective distributions (see instructions)	2f		27744
g Certain deemed distributions of participant loans (see instructions)	2g		0
h Interest expense	2h		0
i Administrative expenses: (1) Professional fees	2i(1)	0	
(2) Contract administrator fees	2i(2)	0	
(3) Investment advisory and management fees	2i(3)	0	
(4) Other	2i(4)	45480	
(5) Total administrative expenses. Add lines **2i(1)** through **(4)**	2i(5)		45480
j Total expenses. Add all **expense** amounts in column (b) and enter total	2j		5196079
Net Income and Reconciliation			
k Net income (loss). Subtract line **2j** from line **2d**	2k		-883436
l Transfers of assets:			
(1) To this plan	2l(1)		13331417
(2) From this plan	2l(2)		

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) [ ] Unqualified **(2)** [ ] Qualified **(3)** [X] Disclaimer **(4)** [ ] Adverse

b Did the accountant perform a limited scope audit pursuant to 29 CFR 2520.103-8 and/or 103-12(d)? [X] Yes [ ] No

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: WEINSTEIN SPIRA & CO., P.C. **(2)** EIN: 74-2181616

d The opinion of an independent qualified public accountant is **not attached** because:

(1) [ ] This form is filed for a CCT, PSA, or MTIA. **(2)** [ ] It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l.

During the plan year:

		Yes	No	Amount
a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.)	4a		X	
b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)	4b		X	

			Yes	No	Amount
c	Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)	4c		X	
d	Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)	4d		X	
e	Was this plan covered by a fidelity bond?	4e	X		500000
f	Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	4f		X	
g	Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?	4g		X	
h	Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?	4h		X	
i	Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	4i	X		
j	Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked, and see instructions for format requirements.)	4j		X	
k	Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?	4k		X	
l	Has the plan failed to provide any benefit when due under the plan?	4l		X	
m	If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	4m		X	
n	If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3	4n		X	
o	Defined Benefit Plan or Money Purchase Pension Plan Only: Were any distributions made during the plan year to an employee who attained age 62 and had not separated from service?	4o			

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year?
If "Yes," enter the amount of any plan assets that reverted to the employer this year ☐ **Yes** ☒ **No** **Amount:**

5b If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

5b(1) Name of plan(s)	**5b(2)** EIN(s)	**5b(3)** PN(s)

5c If the plan is a defined benefit plan, is it covered under the PBGC insurance program (See ERISA section 4021.)? ..... ☐ Yes ☐ No ☐ Not determined
If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year_____. (See instructions.)

Part V Trust Information

6a Name of trust	**6b** Trust's EIN

6c Name of trustee or custodian	**6d** Trustee's or custodian's telephone number

SCHEDULE R (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Retirement Plan Information

This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2016

This Form is Open to Public Inspection.

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A Name of plan
IDERA 401(K) SAVINGS PLAN

B Three-digit plan number (PN) ▶ 001

C Plan sponsor's name as shown on line 2a of Form 5500
IDERA, INC.

D Employer Identification Number (EIN)
76-0662481

Part I Distributions

All references to distributions relate only to payments of benefits during the plan year.

1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions **1**

2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits):

EIN(s): 04-6568107

Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.

3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year **3**

Part II Funding Information (If the plan is not subject to the minimum funding requirements of section of 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)

4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

If the plan is a defined benefit plan, go to line 8.

5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. **Date:** Month _____ Day _____ Year _____

If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.

6 **a** Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived) **6a**

b Enter the amount contributed by the employer to the plan for this plan year **6b**

c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount) **6c**

If you completed line 6c, skip lines 8 and 9.

7 Will the minimum funding amount reported on line 6c be met by the funding deadline? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

Part III Amendments

9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box. ..... ☐ **Increase** ☐ **Decrease** ☐ **Both** ☐ **No**

Part IV ESOPs (see instructions). If this is not a plan described under Section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.

10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan? ..... ☐ **Yes** ☐ **No**

11 **a** Does the ESOP hold any preferred stock? ..... ☐ **Yes** ☐ **No**

b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.) ..... ☐ **Yes** ☐ **No**

12 Does the ESOP hold any stock that is not readily tradable on an established securities market? ..... ☐ **Yes** ☐ **No**

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that contributed more than 5% of total contributions to the plan during the plan year (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify):

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

14 Enter the number of participants on whose behalf no contributions were made by an employer as an employer of the participant for:

a The current year	**14a**	
b The plan year immediately preceding the current plan year	**14b**	
c The second preceding plan year	**14c**	

15 Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:

a The corresponding number for the plan year immediately preceding the current plan year	**15a**	
b The corresponding number for the second preceding plan year	**15b**	

16 Information with respect to any employers who withdrew from the plan during the preceding plan year:

a Enter the number of employers who withdrew during the preceding plan year	**16a**	
b If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers	**16b**	

17 If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment. ☐

Part VI Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans

18 If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐

19 If the total number of participants is 1,000 or more, complete lines (a) through (c)

a Enter the percentage of plan assets held as:
Stock: _____% Investment-Grade Debt: _____% High-Yield Debt: _____% Real Estate: _____% Other: _____%

b Provide the average duration of the combined investment-grade and high-yield debt:
☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more

c What duration measure was used to calculate line 19(b)?
☐ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify):

Part VII IRS Compliance Questions

20a Is the plan a 401(k) plan? If "No," skip b	☐ Yes ☐ No
20b How did the plan satisfy the nondiscrimination requirements for employee deferrals under section 401(k)(3) for the plan year? Check all that apply:	☐ Design-based safe harbor ☐ "Prior year" ADP test ☐ "Current year" ADP test ☐ N/A
21a What testing method was used to satisfy the coverage requirements under section 410(b) for the plan year? Check all that apply:	☐ Ratio percentage test ☐ Average benefit test ☐ N/A
21b Did the plan satisfy the coverage and nondiscrimination requirements of sections 410(b) and 401(a)(4) for the plan year by combining this plan with any other plan under the permissive aggregation rules?	☐ Yes ☐ No

22a If the plan is a master and prototype plan (M&P) or volume submitter plan that received a favorable IRS opinion letter or advisory letter, enter the date of the letter _____/_____/_____ and the serial number _____.

22b If the plan is an individually-designed plan that received a favorable determination letter from the IRS, enter the date of the most recent determination letter _____/_____/_____.

IDERA 401(K) SAVINGS PLAN
SPONSOR'S EIN: 76-0662481
PLAN NUMBER: 001
SCHEDULE H, LINE 4i - SCHEDULE OF ASSETS (HELD AT END OF YEAR)
December 31, 2016

	(a) (b) Identity of Issuer or Similar Party	(c) Description of Investment	(e) Current Value
		Mutual Funds:	
*	Fidelity Investments	Fidelity Advisor Freedom 2040 Fund - Institutional Class	$ 1,782,746
*	Fidelity Investments	Fidelity Advisor New Insights Fund - Institutional Class	566,018
	PIMCO Investments	PIMCO Income Fund - Institutional Class	366,751
	American Century Investments	American Century Mid Cap Value Fund - R6 Class	584,339
	JP Morgan Chase	JP Morgan Small-Cap Core Select Fund	38,380
	Oppenheimer Funds	Oppenheimer International Growth Fund - Class I	250,202
	Janus Investment Fund	Janus Enterprise Fund - Class I	308,906
	JP Morgan Chase	JP Morgan Intrepid Value Fund - Class R6	433,731
	Oppenheimer Funds	Oppenheimer Developing Markets - Class I	149,208
*	Fidelity Investments	Fidelity 500 Index Fund	1,584,342
*	Fidelity Investments	Fidelity Small Cap Index Fund - Institutional Class	140,062
*	Fidelity Investments	Fidelity Mid Cap Index Fund - Investor Class	228,139
*	Fidelity Investments	Fidelity Advisor Freedom 2060 Fund - Institutional Class	2,945
*	Fidelity Investments	Fidelity Advisor Large-Cap Fund - Institutional Class	397,230
*	Fidelity Investments	Fidelity Advisor Freedom 2035 Fund - Institutional Class	3,016,703
	BlackRock Investments	BlackRock Global Allocation Fund - Institutional Class	259,865
*	Fidelity Investments	Fidelity Advisor Freedom 2030 Fund - Institutional Class	2,718,646
	Dreyfus Corporation	Dreyfus Opportunistic Midcap Value Fund Class I	380,123
	American Century Investments	American Century Investments Inflation Adjusted Bond Fund - Investor Class	386,268
*	Fidelity Investments	Fidelity Advisor Worldwide Fund - Institutional Class	171,637
*	Fidelity Investments	Fidelity Advisor Freedom 2020 Fund - Institutional Class	555,446
*	Fidelity Investments	Fidelity Advisor Small-Cap Value Fund - Institutional Class	243,025
	BlackRock Investments	BlackRock High Yield Bond Portfolio - Institutional Shares	88,046
*	Fidelity Investments	Fidelity Advisor Small-Cap Growth Fund - Institutional Class	157,598
	Franklin Templeton	Templeton Foreign Fund - Advisor Class	44,730
*	Fidelity Investments	Fidelity Advisor Technology Fund - Class I	185,230
*	Fidelity Investments	Fidelity Advisor Freedom 2015 Fund - Institutional Class	441,341
	Franklin Templeton	Templeton Global Bond Fund - Advisor Class	68,809
*	Fidelity Investments	Fidelity Retirement Money Market Portfolio	405,383
*	Fidelity Investments	Fidelity Advisor Freedom 2050 Fund - Institutional Class	496,599
	Federated Funds	Federated International Leaders Fund - Class IS	36,932
*	Fidelity Investments	Fidelity Advisor Freedom 2045 Fund - Institutional Class	470,060
*	Fidelity Investments	Fidelity Advisor Materials Fund - Class I	10,104
*	Fidelity Investments	Fidelity Advisor Freedom 2055 Fund - Institutional Class	61,226
*	Fidelity Investments	Fidelity Advisor Freedom 2025 Fund - Institutional Class	1,838,801
*	Fidelity Investments	Fidelity Advisor Freedom 2010 Fund - Institutional Class	24,646
*	Fidelity Investments	Fidelity Advisor Freedom 2005 Fund - Institutional Class	3,648
*	Fidelity Investments	Fidelity Advisor Freedom Income Fund - Class I	9,912
			18,907,777
		Participant Loans:	
*	Participant Loans	Interest rates ranging from 3.25% to 4.50%	80,907
			$ 18,988,684

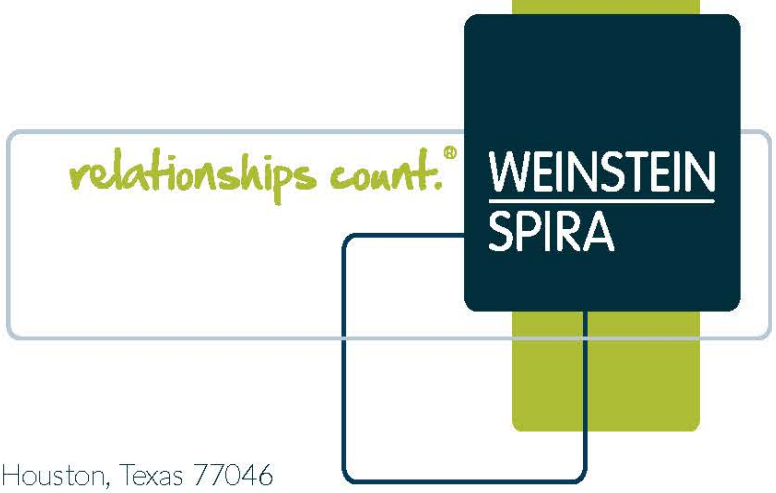
* Indicates a party-in-interest

This schedule has been prepared from information certified by Fidelity Management Trust Company as complete and accurate.

See independent auditors' report.

Idera 401(k) Savings Plan

Annual Financial Report
Houston, Texas
December 31, 2016



Weinstein Spira | Three Greenway Plaza, Suite 1700 | Houston, Texas 77046

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All other schedules listed by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 are omitted, as they are not applicable.

WEINSTEIN SPIRA

certified public accountants
& business advisors

Independent Auditors' Report

July 21, 2017

Plan Administrator
Idera 401(k) Savings Plan
Houston, Texas

Report on the Financial Statements

We were engaged to audit the accompanying financial statements of the Idera 401(k) Savings Plan (the Plan) which comprise the statements of net assets available for benefits as of December 31, 2016 and 2015, the related statement of changes in net assets available for benefits for the year ended December 31, 2016, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on conducting the audits in accordance with auditing standards generally accepted in the United States of America. Because of the matter described in the Basis for Disclaimer of Opinion paragraph, however, we were not able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion.

Basis for Disclaimer of Opinion

As permitted by 29 CFR 2520.103-8 of the Department of Labor's (DOL) Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, the plan administrator instructed us not to perform, and we did not perform, any auditing procedures with respect to the information summarized in Note 3, which was certified by Fidelity Management Trust Company, the trustee of the Plan, except for comparing the information with the related information included in the financial statements. We have been informed by the plan administrator that the trustee holds the Plan's investment assets and executes investment transactions. The plan administrator has obtained a certification from the trustee as of December 31, 2016 and 2015, and for the year ended December 31, 2016, that the information provided to the plan administrator by the trustee is complete and accurate.

July 21, 2017
Idera 401(k) Savings Plan

Disclaimer of Opinion

Because of the significance of the matter described in the Basis for Disclaimer of Opinion paragraph, we have not been able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion. Accordingly, we do not express an opinion on these financial statements.

Other Matter

The supplemental Schedule H, Line 4i - Schedule of Assets (Held at End of Year) as of December 31, 2016 is required by the DOL's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 and is presented for the purpose of additional analysis and is not a required part of the financial statements. Because of the significance of the matter described in the Basis for Disclaimer of Opinion paragraph, we do not express an opinion on this supplemental schedule.

Report on Form and Content in Compliance With DOL Rules and Regulations

The form and content of the information included in the financial statements and supplemental schedule, other than that derived from the information certified by the trustee, have been audited by us in accordance with auditing standards generally accepted in the United States of America and, in our opinion, are presented in compliance with the DOL's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974.

Weinstein Spira & Company P.C.

WEINSTEIN SPIRA & COMPANY, P.C.
Houston, Texas

IDERA 401(K) SAVINGS PLAN
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

	December 31,	
	2016	2015
ASSETS		
Investments, at Fair Value	**$ 18,907,777**	$ 6,483,380
Notes Receivable from Participants	**80,907**	57,323
Net Assets Available for Benefits	**$ 18,988,684**	$ 6,540,703

See independent auditors' report and accompanying notes to financial statements.

IDERA 401(K) SAVINGS PLAN
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
For the Year Ended December 31, 2016

Contributions:	
Employee	$ 1,444,416
Rollover	126,302
Other employer	6,996
Total Contributions	1,577,714
Investment Income:	
Net appreciation in fair value of investments	1,932,399
Interest, dividends and other	799,305
Investment Income	2,731,704
Interest Income on Notes Receivable from Participants	3,225
Benefit Payments	(5,150,599)
Administrative Expenses	(45,480)
Net Decrease in Net Assets Prior to Transfer In	(883,436)
Transfer from Embarcadero Technologies, Inc. 401(k) Plan	13,331,417
Net Assets Available for Benefits - Beginning of Year	6,540,703
Net Assets Available for Benefits - End of Year	$ 18,988,684

See independent auditors' report and accompanying notes to financial statements.

Note 1 - Plan Description

The following brief description of the Idera 401(k) Savings Plan (the Plan) is provided for general information only. Participants should refer to the plan document for a more complete description of the Plan's provisions.

General

The Plan is a defined contribution plan covering eligible employees of Idera, Inc. and participating employers (collectively, the Company) and is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA). The Plan was adopted by the Company on January 1, 2002 and has since been amended and restated.

Idera, Inc. serves as the plan administrator. Fidelity Management Trust Company (Fidelity) serves as the Plan's trustee.

In October 2015, the Company acquired Embarcadero Technologies, Inc. The Embarcadero Technologies, Inc. 401(k) Plan (Embarcadero Plan) was merged into the Plan effective February 1, 2016.

Eligibility

Participation in the Plan is available for all employees, as defined, who are at least 18 years of age. Prior to November 4, 2016, participants had to be at least 21 years of age to participate in the Plan. The Plan includes a savings feature designed to permit the employee and the Company to contribute to the Plan, at amounts allowable under Section 401(k) of the Internal Revenue Code (IRC).

Contributions

Employee pre-tax and after-tax (Roth) contributions are made to the Plan by electing to contribute a portion of the employee's compensation, as defined, subject to the maximum limits allowed by law. Participants who have attained age 50 before the end of the plan year are eligible to make catch-up contributions. Participants may also contribute amounts representing distributions from other qualified plans.

All eligible employees automatically begin deferring 1% of their compensation for each payroll period after beginning employment, unless an affirmative election not to contribute or to contribute at a different percentage is made by the employee. The contributions are made on a pre-tax basis unless the employee affirmatively designates that any portion or all of the contributions be treated as Roth contributions.

The Company may elect to make matching contributions equal to a discretionary percentage, to be determined by the Company, of an employee's elective deferral. No matching contributions were made for the year ended December 31, 2016.

Participant Accounts

Participants direct the investment of their accounts into various investment options offered by the Plan. Under the Plan, earnings and losses are allocated to the participants' accounts daily according to an allocation formula provided in the plan document.

Vesting and Forfeitures

Participants are immediately vested in their contributions plus actual earnings thereon. Vesting in Company contributions is based on years of service. A participant is 0% vested through the first two years of service, at which point they become 100% vested. With respect to employer contributions made to the Embarcadero Plan prior to the transfer in 2016, a participant is 25% vested after 1 year of service and becomes 100% vested after the completion of 2 years of service.

There were $37,654 and $304 of forfeited non-vested amounts available at December 31, 2016 and 2015, respectively. Included in the balance at December 31, 2016 is $37,101 of forfeitures that were transferred to the Plan during 2016 as part of the Embarcadero Plan transfer. Forfeitures are first used to pay plan expenses then to reduce future matching contributions. For the year ended December 31, 2016, $2,500 of forfeitures were utilized to pay plan expenses.

Benefit Payments

Distributions may be made to participants upon termination of employment, death, disability or retirement. Withdrawals may be made by active participants upon attainment of age 59½ or due to financial hardship. All distributions from the Plan are in the form of a lump sum distribution. Upon withdrawal from the Plan or termination of employment, participants with an account balance of $1,000 or less shall receive an automatic lump sum distribution from the Plan. For participants with an account balance greater than $1,000 but less than $5,000, the plan administrator shall make a direct rollover into an individual retirement account. Withdrawals from the Plan may be subject to federal income tax on contributions and income earned.

Notes Receivable from Participants

Notes receivable from participants are loans to participants secured by the vested portion of their accounts. Participants may borrow from their fund accounts up to a maximum equal to the lesser of $50,000 or 50% of their vested interest in the Plan. The minimum loan is $1,000. Loans to participants are secured by their participant account balance as allowed by the Plan. Interest rates are based on the prime rate plus 1% on the date of issuance. Principal and interest are repaid through payroll deductions. Loans are to be repaid within five years unless the purpose of the loan is to acquire a principal residence, which allows the loan to extend to 15 years. A participant may only have one loan outstanding at any given time.

Note 2 - Accounting Policies

Basis of Accounting

The accompanying financial statements have been prepared using the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America (GAAP).

Investment Valuation and Income Recognition

Investments are stated at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See Note 4 for discussion of fair value measurements.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. The net appreciation or depreciation in the fair value of investments includes realized gains and losses on investments sold during the year as well as appreciation and depreciation of investments held at the end of the year.

Notes Receivable from Participants

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Interest is recorded on the accrual basis. No allowance for credit losses has been recorded as of December 31, 2016 and 2015. In general, notes receivable from participants are placed into default in the calendar quarter following the quarter in which no payment on the note is made and such defaults are recognized as distributions based upon the terms of the plan document.

Benefit Payments

Benefit payments are recorded when paid.

Administrative Expenses

Loan fees and certain transactional charges are paid by the participants. All other administrative costs are paid by the Plan unless paid by the Company, at its discretion. Investment related expenses are included in the net appreciation or depreciation in the fair value of investments.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires the plan administrator to make estimates and assumptions that affect the reported amounts of assets, liabilities, and changes therein and the disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

Risks and Uncertainties

The Plan invests in various investment securities. Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the value of investments will occur in the near term and may impact participants' account balances and the amounts reported in the financial statements.

Subsequent Events

Management of the Plan evaluates events occurring subsequent to the date of the financial statements in determining the accounting for and disclosure of transactions and events that affect the financial statements. Subsequent events have been evaluated through July 21, 2017, which is the date the financial statements were available to be issued.

Note 3 - Information Certified by the Trustee

The plan administrator has elected the method of annual reporting compliance permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. Accordingly, as permitted under such election, the plan administrator has obtained a certification from the trustee of the Plan that all of the information provided is complete and accurate. Information included in the financial statements and accompanying notes to the financial statements as to investments, notes receivable from participants, investment income, interest income on notes receivable from participants, and all the related information in the supplemental schedule is presented in reliance solely upon this certification.

The Plan's independent auditors did not perform auditing procedures with respect to this information except for comparing such information to the related information included in the financial statements, supplemental schedule and accompanying notes.

Note 4 - Fair Value Measurements

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described as follows:

Level 1 - Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2 - Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 - Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

The following is a description of the valuation methodology used for assets measured at fair value. There have been no changes in the methodology used at December 31, 2016 and 2015.

Mutual Funds: These funds are valued daily at their quoted market prices.

The following tables set forth by level, within the fair value hierarchy, the Plan's investments at fair value:

	December 31, 2016			
	Level 1	**Level 2**	**Level 3**	**Total**
Mutual funds	$18,907,777			**$18,907,777**

	December 31, 2015			
	Level 1	**Level 2**	**Level 3**	**Total**
Mutual funds	$ 6,483,380			**$ 6,483,380**

Note 5 - Federal Income Tax

The Plan has not received a favorable determination letter from the Internal Revenue Service exempting it from federal income tax; however the volume submitter plan adopted by the Plan effective February 1, 2016, was accepted by the IRS in their advisory letter dated March 31, 2014. The volume submitter plan has since been amended; however, the plan administrator through its adoption of the volume submitter plan believes that the Plan is currently designed and being operated in compliance with the applicable requirements of the IRC. Therefore, no provision for income taxes has been included in the Plan's financial statements.

GAAP requires plan management to evaluate tax positions taken by the Plan and recognize a tax liability if the Plan has taken an uncertain tax position that more likely than not would not be sustained upon examination by the Internal Revenue Service. The Plan is subject to routine audits by taxing jurisdictions, however, there are currently no audits for any tax periods in progress.

Note 6 - Plan Termination

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. If the Plan is terminated, all participants become 100% vested.

Note 7 - Party-in-Interest Transactions

Certain Plan investments are shares of mutual funds managed by an affiliate of Fidelity; therefore, the Plan's investment transactions in these funds qualify as party-in-interest transactions. These transactions are covered by an exemption from the "prohibited transaction" provisions of ERISA and the IRC.

Fidelity provides certain administrative services to the Plan pursuant to a service agreement between the Company and Fidelity that was effective June 1, 2016. Fidelity received revenue from certain Fidelity and non-Fidelity investment products held by the Plan as prescribed in the service agreement. This revenue is used to offset certain amounts owed to Fidelity for its administrative services to the Plan. If the revenue received by Fidelity exceeds the amount owed to them by the Plan, then the excess is remitted to the Plan on a quarterly basis. Such amounts may be used by the Plan to pay plan related expenses or allocated to the accounts of participants. The balance held by the Plan in their revenue credit account at December 31, 2016 was approximately $11,000.