



**New York State
Reproduction of Income Tax Forms:
A Guide for
Software Developers for
Tax Year 2020**

For Personal Income, Fiduciary, Estate, and Partnership tax.

The New York State Department of Taxation and Finance (NYSDTF) reserves the right to reject any reproduced form that does not meet the criteria mentioned in this publication and to change the criteria at any time. The information presented is current as of this publication's print date.

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Section 1: Introduction to paper vendor testing

Introduction

NYS DTF has established these guidelines and standards for NACTP members that plan to market, distribute, or file substitute or reproduced tax forms.

Publication 75

This publication provides the testing requirements for paper reproduction of NYS DTF scannable and non-scannable forms. The information provided in this publication applies to all associated tax types (personal income tax (PIT), fiduciary (FID), estate (ET), and partnership tax (PT)) unless otherwise noted.

This publication should be used in conjunction with the most current version of the following publications:

- **Publication 95**, *NYS Modernized e-File (MeF) Guide for Software Developers for Tax Year 2020*, can be found under *Additional Specifications* at: https://www.tax.ny.gov/bus/efile/Ind_income_tax_home_page.htm. This site is password protected. If you need to access the site, contact the 2D Test Team via email at 2D.Vendor.Inquiries@tax.ny.gov.
- **Publication 63**, *Specifications for Reproduction of New York State Sales and Use Tax, Employer, and Miscellaneous Tax Forms*, can be found at the *Forms Bulletin Board for Practitioners* at: <https://www.tax.ny.gov/draftforms/incomefinal.htm>. This site is password protected. If you need to access the site, contact the 1D Test Team via email at 1D.Vendor.Inquiries@tax.ny.gov.

New York State income tax forms

Preliminary and final forms can be found on the *Forms Bulletin Board for Practitioners* at: <https://www.tax.ny.gov/draftforms/incomefinal.htm>. This site is password protected. If you need to access the site, contact the 1D Test Team via email at 1D.Vendor.Inquiries@tax.ny.gov.

Unchanged forms can be found under the last revision date on our public website at: https://www.tax.ny.gov/forms/prvforms/prev_year.htm

The TR-579 form series are located under the specific tax type at: https://www.tax.ny.gov/bus/efile/elf_sw_d.htm

Organizational structure

NYS DTF has two teams testing paper vendors:

- **1D Test Team**
- **2D Test Team**

The **1D Test Team** focuses on scannable and non-scannable forms, this includes: DTF-prefix forms, IT-prefix forms that do not contain a 2D barcode, estate tax forms, and payment vouchers. They review forms to make sure the replications are substantially identical to NYS DTF forms.

The **2D Test Team** reviews scannable IT-prefix forms that contain 2D barcodes. They review forms to make sure the 2D barcode is formatted correctly and meets NYS DTF 2D specifications.

Email communications with 1D and 2D Test Teams

The 1D and 2D Test Teams prefer email for electronic delivery of information. Here are the 1D and 2D Test Team email addresses:

- **1D Test Team:** 1D.Vendor.Inquiries@tax.ny.gov
- **2D Test Team:** 2D.Vendor.Inquiries@tax.ny.gov

Physical mailing addresses

Mail (U.S. Postal Service only) to:
NYS TAX DEPARTMENT
OPTS PIT 1D FORMS REVIEW
W A HARRIMAN CAMPUS
ALBANY NY 12227-0865

or

Send by **private delivery service** to:
NYS TAX DEPARTMENT
OPTS PIT 1D FORMS REVIEW
90 COHOES AVE
GREEN ISLAND NY 12183

New for tax year 2020 (TY2020)

New forms for TY2020:

- Form IT-651, *Recovery Tax Credit*
- Form IT-652, *Employer- Provided Childcare Credit*
- Form IT-558, *New York State Adjustments due to Decoupling from the IRC*

Discontinued forms for TY2020:

- Form IT-243, *Claim for Biofuel Production Credit*
- Form IT-222, *General Corporation Tax Credit for Full-Year New York City Resident Individuals, Estates, and Trusts*
- Form NYC-208, *Claim for New York City Enhanced Real Property Tax Credit*

NACTP

- All products require separate 4-digit vendor codes.

Specific to 1D testing

- The 1D vendor team has a new email address and can be reached at: 1D.Vendor.Inquiries@tax.ny.gov.
- All test codes will be tested separately and cannot be submitted with any other test code's forms.
- Test code 4 forms no longer require a corporation tax (CORP) test deck.
- Estate tax forms will be tested as test code 6 forms and will require a variable sample.

Specific to 2D testing

- Scenarios 2.10 and 3.10 have been renamed to 2.6 and 3.4.
- All tax preparer fields are required on tax professional software.
- Software will be required to capture device ID, IP timestamp, and IP address at return creation and submission.
- New free file indicator field required for approved free file vendors.

Section 2: Software requirements

Reporting and correcting errors in software products

The following steps must be taken to ensure stoppage of production errors:

1. Immediately notify NYSDF of any software errors as they are identified during the filing season.
2. Discuss with NYSDF options to correct errors.
3. Make every reasonable effort to test with NYSDF before moving changes to production.
4. Correct software errors identified by the Internal Revenue Service (IRS), NYSDF, or you, as the vendor, and distribute updates of your software packages to your users.
5. The vendor must supply NYSDF with the specific resolution and date when the software fix is released.
6. Users of desktop products who attempt to file 10 or more business days after a production release will be required to download and apply product updates.
7. Failure to comply may result in suspension from the program.

Provide a copy of software

NYSDF requires that vendors provide a copy of new software as soon as it is released to the public. NYSDF will use the software for research and to troubleshoot production issues, not to prepare or file returns. If vendors support e-file via an online application, NYSDF is requesting access to that as well. Online applications can be sent via email to the 1D Test Team at 1D.Vendor.Inquiries@tax.ny.gov. Physical copies should be mailed to one of the physical mailing addresses mentioned previously.

Required messages

Provide a printed copy of the following messages from your software product and indicate where in the software the message is displayed.

E-file mandate

For information regarding [Who the e-file mandate applies to](#), visit our website. If returns are not filed and paid electronically when required, NYSDF can impose penalties on the preparer.

- **Form TR-573.1**, which notifies the taxpayer of the e-file mandate, **must** be displayed and printed **for self-prepared software** when the taxpayer does **not** select to e-file their return.
- **Form TR-573.2**, which notifies the taxpayer of the e-file mandate, **must** be displayed and printed for **professional software** when the taxpayer does **not** select to e-file their return.

Software products for consumers must display the following message:

This message **must** be provided in a manner that ensures the user will see it at the start of filing:

You are required to e-file your New York State return.

New York State requires most taxpayers to file electronically if they are using tax software to prepare their returns. ***Please note that there is no additional fee for e-filing.*** The law also provides that once you've paid for tax preparation software, you cannot be charged an additional fee for e-filing.

Software products for professionals must display the following messages:

Vendors **must** provide the following information to their **tax professional users**. This message must be provided in a manner that ensures the user will see it at least once at the start of the filing season.

New York State e-file mandate

Taxpayers and tax return preparers using approved e-file tax software to prepare taxpayer returns are required to electronically file (e-file) authorized tax documents.

Visit the New York State Tax Department's website to learn more about the e-file mandate for tax professionals: www.tax.ny.gov

If you do not file and pay electronically when required to do so, you will be subject to penalties from the New York State Tax Department.

Vendors **must** display the following information to users during the preparation of a **personal income tax or fiduciary income tax return or extension**:

Sign up with the NYS Tax Department to receive an email notification when your New York State income tax refund is issued.

The New York State Tax Department provides email notifications to taxpayers about their personal tax accounts. Visit Online Services at the NYS Tax Department website, www.tax.ny.gov.

Additional messages required for forms with 2D barcodes

In addition to the e-file mandate screen shots above, forms with 2D barcodes require the following screen shots be sent to the 2D Test Team via email at 2D.Vendor.Inquiries@tax.ny.gov:

Handwritten entries are not allowed

Printing of 2D forms will require that the vendor add a pop-up message stating:

Filing your return on paper is not recommended. If it is necessary to file a paper return, do not write on the return. Only signatures are allowed. Other handwritten information will not be used in tax computation or for processing your return.

Driver license and non-driver ID

You must provide a screenshot of the pop-up message from your software demonstrating that the driver license or non-driver ID information is being presented to the user. For more information, see the following links:

- **Preparer:** <https://www.tax.ny.gov/tp/driverlicense.htm>
- **Individual:** www.tax.ny.gov/pit/efile/individual-driver-license.htm

ACH withdrawal

You must send screen shots of your software's ACH withdrawal date showing the electronic funds withdrawal date as the current date and as a future date, but not past the filing due date. If screen shots cannot readily show the default as the current date, you must provide a confirmation statement.

- **Note:** We require that if date default functionality exists in your software, you must make the ACH payment date default to current date. The software must also include the ability for the taxpayer to change the ACH payment date to a future date, up to the filing due date. Setting the ACH payment default date to the filing due date is not allowed. Setting the payment default date past the filing due date is also not allowed.

Printed returns

When preparing a credit form, if the taxpayer meets a form condition that says, "stop; *you do not qualify for this credit.*", present message and do not allow the form to print.

Section 3: Approval process

Failure to complete 1D and 2D barcode testing **may delay your electronic filing (MeF) approval**. Also, substitute forms are not to be released until NYSDTF release their version of the form to the public. This is considered the release date and any substitute forms filed by a taxpayer in advance of the release date will not be processed.

NACTP

All products require separate 4-digit vendor codes. If you are unable to receive a 4-digit vendor code from the NACTP, contact the 1D Test Team via email at 1D.Vendor.Inquiries@tax.ny.gov.

Letter of Intent (LOI)

Vendors interested in testing paper reproduction of NYSDTF forms must submit an LOI. The LOI will be available on the *Forms Bulletin Board for Practitioners* at: <https://www.tax.ny.gov/draftforms/incomefinal.htm>. This site is password protected. If you need to access the site, contact the 1D Test Team via email at 1D.Vendor.Inquiries@tax.ny.gov.

Submitting forms for approval

Along with their submitted forms, developers should include a completed cover sheet with each submission:

For 1D testing:

- **Form TR-376.1-IT, Software Developer Forms Approval – 1D**, vendors are required to fill in contact information, original submission or resubmission section, each form submitted, and the test code for each of these forms. If there are any notes for the reviewer, the vendor should write them in the comment section.

For 2D testing:

- **Form TR-376.2-IT, Software Developer Forms Approval – 2D**, vendors are required to fill in contact information, original submission or resubmission section, the main form being tested, and list the scenarios in the submission.

Email format for forms submissions

Subject line

The subject line for a submission package email must be formatted as follows:

For 1D testing:

- Four-digit vendor ID, company name, and form numbers.
 - **Example:** 9999, Company name, 222, 245, 250, and 255

For 2D testing:

- Original submission sample:
 - Vendor Code Main Form Submission
 - **Example:** 1111 IT-201 Submission
- Resubmission sample:
 - Vendor Code Main Form Resubmission
 - **Example:** 1111 IT-201 Resubmission

PDF file format

Forms submissions should be sent in PDF file format or ZIP file format using the following naming conventions for each form:

For 1D testing:

- Blank sample:
 - PKG 0000 (insert vendor code here) _Form XXX_bk.pdf (bk=Blank)
 - **Example:** PKG 1111_Form IT-201-V_bk.pdf
- Full field Sample:
 - PKG 0000(insert vendor code here) _Form XXX_ff.pdf (ff=Full Field)
 - **Example:** PKG 1111_Form IT-245_ff.pdf
- Variable sample:
 - PKG 0000 (insert vendor code here) _Form XXX_var.pdf (var=Variable)
 - **Example:** PKG 1111_Form IT-245_var.pdf

For 2D testing:

- 2D scenario sample:
 - Vendor code_Scenario number_Submission date.
 - **Example:** 1111_2.1_01012020

Numbers of submission samples

For 1D testing:

- There will be a total of 24 forms allowed per week (Sunday to Saturday) with no more than 6 forms submitted per submission.

For 2D testing:

- There is no limit to the number of submission samples. However, we will only accept one main form's set of scenarios per submission email. In the body of the email, vendors should clarify if they are sending less than the full set of scenarios for the main form.

Types of submission samples

1D Testing:

- **Blank sample:**
 - Submit one original printout of a blank form (without data).
- **Full-field sample:**
 - Filling the maximum length of every field supported using X's in fields requiring alpha characters and 9's in fields requiring numeric characters.
- **Variable sample:**
 - Replicate a taxpayer's return by filling most sections of each form with hypothetical taxpayer information.
 - Do not use electronic filing (MeF) Acceptance Testing System (ATS) as samples, or 2D barcode test scenarios.
- **Full test deck:**
 - This requires one variable sample and one full-field sample.
- **Hard copy:**
 - Physically mail in a printed blank sample for each vendor code and include 1D barcodes for all forms supported. To ensure a good reading of the barcode, submissions should only include forms printed out of your software. Do not submit photocopies, as they tend to have poor barcode reads due to low ink saturation.

2D Testing:

- **2D test scenarios** can be found on the *Information for Software Developers* page at: www.tax.ny.gov/bus/efile/Ind_income_tax_home_page.htm. This site is password protected. If you need to access the site, contact the 2D Test Team via email at 2D.Vendor.Inquiries@tax.ny.gov.

Test codes and requirements

Follow the chart below and review the submission requirements for each test code. For a list of forms and their corresponding test codes **see the chart on page 11**.

Test code	Form type	Submission requirements
1	IT-prefix forms that do not contain a 2D barcode	<ul style="list-style-type: none"> ➤ one full test deck. ➤ submit to 1D Test Team.
2	Payment vouchers	<ul style="list-style-type: none"> ➤ a blank, full-field, and variable sample. ➤ submit to 1D Test Team and cc JPMC at: Form_Approval_Submissions@jpmchase.com
3	Forms with 1D barcodes and non-scannable forms	<ul style="list-style-type: none"> ➤ one blank sample ➤ for DTF-prefix forms, send one blank copy ➤ submit to 1D Test Team.
4	DTF-prefix forms	<ul style="list-style-type: none"> ➤ software must support both PIT and Corporation Tax (CT). ➤ one full test deck for PIT only ➤ submit to 1D Test Team
5	Forms with 2D barcode	<ul style="list-style-type: none"> ➤ 2D test scenarios ➤ submit to 2D Test Team
6	ET-prefix forms	<ul style="list-style-type: none"> ➤ one variable sample ➤ submit to 1D Test Team

Forms approval process

Forms will be reviewed in the order they are received. Forms deemed *Approved with Corrections* will not require resubmission. Forms deemed *Not Approved* or *Fail* will need to be resubmitted for approval.

For 1D testing:

- Test submissions will be scanned and manually reviewed for content. Manual review will include examining forms for layout, completeness, and other key points. The entire form will be reviewed before it is returned to the developer for corrections.

For 2D testing:

- Vendors will not be allowed to implement their 2D software into production until they have been approved for all forms and version 01 has been tested successfully.

Checking the accuracy of data calculations is not part of the approval process. Calculation errors may be brought to a vendor's attention, but they will not delay the approval of the form. Data on the forms will be reviewed only for placement and formatting.

Forms approval communication

Software vendors will receive test results within fourteen (14) business days of receipt of forms. We will adhere to the 14-business day review period for original submissions and resubmissions received by close of business Friday, December 11, 2020. Approval status will be communicated via email.

For 1D testing:

- Once approved, you will need to send in hard copies of all forms for testing. These forms should be mailed using one of the physical mailing addresses listed in section 1.

For 2D testing:

- Once approved, you will need to provide the date your product will migrate to production.

Form number	Test code	Form code	Form number	Test code	Form code	Form number	Test code	Form code	Form number	Test code	Form code
IT-6-SNY	1	136	IT-255	1	255	Y-206	1	206	TR-579.2-IT	3	N/A
IT-112.1	1	111	IT-256	1	256	IT-201-V	2	040	TR-579.3-IT	3	N/A
IT-112-C	1	141	IT-257	1	257	IT-205-V	2	045	TR-579-IT	3	N/A
IT-203-A*	1	233	IT-258	1	258	IT-370	2	N/A	TR-579-PT	3	N/A
IT-203-ATT	1	243	IT-261	1	356	IT-370-PF	2	N/A	DTF-621	4	621
IT-203-F*	1	323	IT-398	1	398	IT-2105	2	N/A	DTF-622	4	622
IT-203-GR	1	305	IT-399	1	399	IT-2106	2	N/A	DTF-624	4	624
IT-203-GR-ATT-A	1	306	IT-501	1	501	IT-2658	2	031	DTF-626	4	626
IT-203-GR-ATT-B	1	307	IT-601	1	161	IT-2658-MTA	2	N/A	DTF-630	4	630
IT-203-GR-ATT-C	1	308	IT-602	1	162	IT-2658-NYS	2	N/A	DTF-664	4	664
IT-203-S	1	310	IT-603	1	163	IT-2663-V	2	N/A	DTF-686	4	686
IT-203-S-ATT	1	311	IT-604	1	164	IT-2664-V	2	N/A	DTF-686-ATT	4	687
IT-203-TM	1	315	IT-605	1	165	DTF-75*	3	N/A	IT-1099-R (2D)	5	099
IT-203-TM-ATT-A	1	316	IT-606	1	166	DTF-95*	3	N/A	IT-112-R (2D)	5	112
IT-203-TM-ATT-B	1	317	IT-607	1	607	DTF-96*	3	N/A	IT-196 (2D)	5	196
IT-204-LL	1	240	IT-611	1	171	DTF-281	3	281	IT-2 (2D)	5	102
IT-205-A	1	207	IT-611.1	1	170	DTF-350	3	350	IT-201 (2D)	5	201
IT-205-C	1	125	IT-611.2	1	169	DTF-505	3	506	IT-201-ATT (2D)	5	241
IT-209	1	209	IT-612	1	172	DTF-620	3	N/A	IT-201-X (2D)	5	361
IT-212	1	212	IT-613	1	173	DTF-625	3	625	IT-203 (2D)	5	203
IT-212-ATT	1	242	IT-631	1	631	DTF-625-ATT	3	325	IT-203-B (2D)	5	234
IT-213-ATT	1	239	IT-633	1	633	IT-59*	3	590	IT-203-X (2D)	5	363
IT-217	1	217	IT-634	1	634	IT-119	3	119	IT-204 (2D)	5	204
IT-219	1	219	IT-635	1	635	IT-135	3	135	IT-204.1 (2D)	5	116
IT-221	1	221	IT-636	1	636	IT-182	3	182	IT-204-CP (2D)	5	117
IT-223	1	223	IT-637	1	637	IT-195	3	195	IT-204-IP (2D)	5	118
IT-226	1	226	IT-638	1	638	IT-203-C*	3	235	IT-205 (2D)	5	205
IT-227	1	227	IT-640	1	640	IT-205-J	3	126	IT-213 (2D)	5	213
IT-228	1	228	IT-641	1	641	IT-205-T	3	208	IT-214 (2D) (SA) or (ATT)	5	214
IT-230	1	230	IT-642	1	642	IT-211*	3	211	IT-215 (2D)	5	215
IT-236	1	236	IT-643	1	643	IT-260*	3	260	IT-216 (2D)	5	216
IT-237	1	237	IT-644	1	644	IT-260.1*	3	261	IT-225 (2D)	5	225
IT-238	1	238	IT-645	1	645	IT-280	3	280	IT-272 (2D)	5	272
IT-239	1	299	IT-646	1	646	IT-285*	3	285	IT-360.1 (2D)	5	360
IT-241	1	301	IT-647	1	647	IT-648	3	648	IT-558 (2D) (new)	5	558
IT-242	1	302	IT-647-ATT	1	347	IT-650	3	650	ET-14	6	N/A
IT-245	1	354	IT-649	1	649	IT-2105.1*	3	N/A	ET-30	6	002
IT-246	1	355	IT-651 (new)	1	651	IT-2106.1*	3	N/A	ET-85	6	003
IT-248	1	248	IT-652 (new)	1	652	IT-2658-E	3	N/A	ET-90	6	008
IT-249	1	249	IT-2102.6	1	110	IT-2659	3	69	ET-117	6	N/A
IT-250	1	250	IT-2105.9	1	059	TR-99*	3	351	ET-130	6	009
IT-251	1	251	NYC-210	1	210	TR-573.1*	3	N/A	ET-133	6	075
IT-252	1	252	Y-203	1	246	TR-573.2*	3	N/A	ET-415	6	N/A
IT-253	1	253	Y-204	1	247	TR-579.1-IT	3	N/A	ET-706	6	022

*Unchanged	(2D) = 23 forms requiring a 2D barcode
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Section 4: Tax form design standards

Introduction

Working with the NACTP, we have developed these design standards that make substitute forms compatible with our processing and printing systems. Complying with these standards results in fewer forms being rejected from the processing stream, thus reducing processing time for taxpayers.

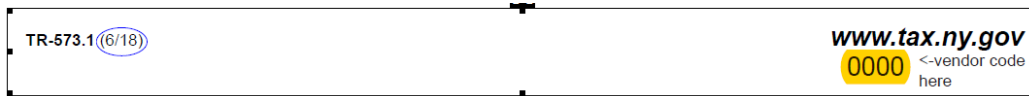
For general information on *Tax Form Design and Standards*, go to the NACTP website at:
<https://www.nactp.org/index.php/income-tax/government-liaison-committee/standards-a-guidelines>

Printing

Software should be programmed to print pages as actual size with no scaling and/or rotation.

Vendor code

You must include your NACTP code or NYSDTF issued four-digit code in the lower right bottom corner of any non-scannable form page as shown:



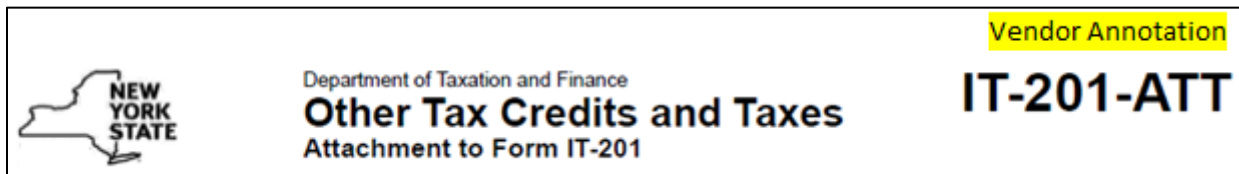
If your purchased software provides forms that are non-scannable, two vendor codes should be printed at the bottom of each page of the form:

- In the left corner, the four-digit vendor ID of the software company providing the forms.
- In the right corner, the four-digit ID of the purchasing company of the form.

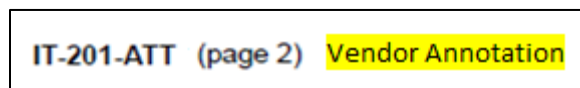
Annotations

A vendor's annotation should be placed above the form number on page 1. For the remaining pages, annotations can be placed to the right of the page number.

Example of annotation above the form number:



Example of annotation next to the page number:



Margins

Margins should match the official form and most forms have a 1/2" minimum clearance, unless otherwise specified.

Watermarks

Forms with 2D barcodes must have a watermark on the right-hand side of each printed page. The watermark must be in **ALL CAPS**. Main forms and attachment forms have different watermarks, see the following:

- **Watermark for main forms (including standalone form):** “NO HANDWRITTEN ENTRIES, OTHER THAN SIGNATURE, ON THIS FORM.”
- **Watermark for attachment forms:** “NO HANDWRITTEN ENTRIES ON THIS FORM.”

Note: Watermarks are exempt from the ½” margin specifications.

Preferred fonts

The style and size must be substantially identical to those used on the official forms. Data must be Arial or Courier in nine (9) point, ten (10) point, eleven (11) point, or twelve (12) point font.

Checkboxes

Approval of checkboxes can be accomplished using full-field or variable data test samples, they should be:

- Designed per the official form layout.
- Formatted as blank or **X** only.
- Set to auto for point size, making the largest checkmark **X** possible.
- We will test all checkboxes on every form you support.

Outline boxes

Must be designed per the official form layout including outline boxes, decimal points, hard-coded zeros and amount fields. Do **not** use underlines in place of rectangular boxes.

Shading in text areas

Where shading on a form is present, it is preferred to apply shading, but not mandatory. Reproduced shaded areas cannot have more than a 20% shade value and data **must not be entered** in these fields.

Unique logos and state seal

Unique logos must replicate the NYSDTF official form:

- for non-year-specific tax forms, use the generic logo map without year.
- for tax-year specific form, use the annual logo map with year.
- graphics are subject to change at any time.

Unique logos can be found on the *Forms Bulletin Board for Practitioners (Bulletin Board)* at:

<https://www.tax.ny.gov/draftforms/incomefinal.htm>. This site is password protected. If you need to access the site, contact the 1D Test Team via email at 1D.Vendor.Inquiries@tax.ny.gov.

Blank fields

When there is no taxpayer form line entry, all data fields must be left blank.

- **Never** enter the following in blank variable data fields:
 - None, N/A, 00, 0.00, or 0.

Variable data formats

Data areas for dates, Social Security numbers, Employer identification numbers, telephone numbers, and ZIP codes must be free from preprinted dashes, and slashes. Exceptions are as follows:

- a date field with the dashes in place, consistent with MeF standards, on the following:
 - Form IT-604, *Claim for QEZE Tax Reduction Credit*.
 - Form IT-606, *Claim for QEZE Credit for Real Property Taxes*.
 - you must however remove dashes and slashes from the remaining SSN, EIN, ZIP code, and ID fields on these forms.

Dollar amount field data

The preferred format for dollar amounts is the whole dollar, which may or may not be followed by a decimal point:

- Commas are never permitted.
- Negative dollar amounts must have a floating minus sign directly to the left of the first number with no extra space between the minus and the number.

Data field delimiters

Data such as Social Security numbers, dates, negative values, telephone numbers, and ZIP codes should display as follows:

- **Social Security numbers:** 999 99 9999.
- **Dates:** when the format is not specified on the form, mmdyyyyy.
- **Negative values:** a floating minus sign directly to the left of the first number with no extra space between the minus and the number.
- **Telephone numbers:** 999 999 9999.
- **ZIP code plus four:** 99999 9999.

Hard coded values

- Three hard-coded zeros and two cent zeros (000.00) must appear on the dependent exemption line (35 or 36) for all main forms (IT-201, IT-201-X, IT-203, IT-203-X).
- There must not be data on hard-coded fiduciary lines. In the following example, column A, the last box should contain the word “Fiduciary” only:

Schedule D – Beneficiary’s and fiduciary’s share of credit (see instructions)		
A Beneficiary’s name (same as on Form IT-205, Schedule C)	B Identifying number	C Share of qualified long-term care insurance credit
Total (enter the amount from Schedule A, line 3, plus the amount from Schedule C, line 7)		9999999999.00
xx	999999999999	9999999999.00
xx	999999999999	9999999999.00
Fiduciary	999999999999	9999999999.00

Data placement

- **Right Justification:** Dollar and percentage amount fields.
 - **Exception:** Form IT-604, *Claim for QEZE Tax Reduction Credit* and Form IT-606, *Claim for QEZE Credit for Real Property Taxes*, full-time employee field totals can be right or center justified.
- **Center Justification:** Dates, IDs, Social Security numbers, ZIP codes, months, middle initial, suffix and numeric fields that are not dollar or percentage amounts.
- **Left Justification:** We prefer that *Type* fields on partnership and fiduciary form schedules be center justified, however, left justification will also be approved.

Tax form instructional text

Page numbers

- If you do not include the last page of instructions on the form, you must change the pages numbers to match the number of pages included in your version of the form, for example: Form IT-182, *Passive Activity Loss Limitations For Nonresidents and Part-Year Residents*.
- If the second page of a two-page form has form content, you must change the second page designation from (back) to (Page 2) on the form.
- If the form text states, "see instructions on back", and instructions are provided, change to "see instructions on page 2". If instructions are not provided, change text to "see instructions".
- if the form text states, "(continued on back)", change the text to "(continued on page 2)."

Payment vouchers

Payment vouchers must meet the following specifications:

- Overall form size should not exceed 8 ½" x 3 ⅔".
- Voucher must be printed at the bottom of the page.
- A cut line or perforation must be included to facilitate accurate separation from 8 1/2" x 11" paper.
- Date formats must match field specifications. If no specifications exist, the format must default to **mmddyyyy**.
- Data font should be 8-point minimum, non-bold, most common fonts are permitted.

Section 5: Image processing and scannable forms

Introduction

NYSDTF continues to find the most efficient and cost-effective way to process tax returns. Ultimately, electronic filing is the quickest and most accurate method. As we move taxpayers towards electronic filing, we employ automated image processing systems as an interim way to improve the processing rate of paper returns. Our systems scan, or mechanically read, paper returns to capture and electronically store pertinent tax data.

Designing for image processing systems

Currently, we have different ways to organize forms for image processing systems, they include:

- One-dimensional (1D) barcodes
- Two-dimensional (2D) barcodes
- Scanlines

One-dimensional (1D) barcodes

NYSDTF has implemented an automated forms process that uses a barcode. Currently, New York uses the Interleaved 2 of 5 barcode to identify income tax forms during processing. DTF-prefix forms may contain either one or two 1D barcodes, you must produce both 1D barcodes.

Height: must be between .25" and .375" (the official form 1D barcodes are .25" tall).

Construction: 1D barcodes may be constructed either graphically as a string of ASCII box characters or scanned onto the form as a bitmap.

Position: NYSDTF forms have 14-digit, 12-digit, and 10-digit 1D barcodes.

10-digit 1D barcodes are found on some unchanged forms and formatted as follows:

- 1-3 NYSDTF Form ID number code assigned as shown in Forms Approval Communication Chart
- 4 Page number (only 1 digit for page number)
- 5-6 Last two digits of the tax year
- 7-10 NACTP or NYSDTF assigned four-digit vendor code. If you purchase approved forms and do not alter the forms in any way, you must use that company's four-digit NACTP code in the 1D barcode.

12-digit 1D barcodes are found on most forms and formatted as follows:

- 1-3 NYSDTF Form ID number code assigned as shown in Forms Approval Communication Chart
- 4 Equals zero (but could be used for a page number over 99)
- 5-6 Page number, with leading zero for pages below 10 (e.g., 01 equals page 1)
- 7-8 Last two digits of the tax year
- 9-12 NACTP or NYSDTF assigned four-digit vendor code. If you purchase approved forms and do not alter the forms in any way, you must use that company's four-digit NACTP code in the 1D barcode.

14-digit 1D barcodes are found on estate tax forms and formatted as follows:

- 1-3 NYSDTF Form ID number code assigned as shown in Forms Approval Communication Chart
- 4 Equals zero (but could be used for a page number over 99)
- 5-6 Page number, with leading zero for pages below 10 (e.g., 01 equals page 1)
- 7-8 Month of the revision date
- 9-10 Revision date year
- 11-14 NACTP or NYSDTF assigned four-digit vendor code. If you purchase approved forms and do not alter the forms in any way, you must use that company's four-digit NACTP code in the 1D barcode.

Example of 1D barcode:



Two-dimensional (2D) barcodes

Forms with 2D barcodes, 2D barcode placement, 2D barcode specifications, and 2D barcode test cases can be found on the *Information for Software Developers* page at: www.tax.ny.gov/bus/efile/Ind_income_tax_home_page.htm. This site is password protected. If you need to access the site, contact the 2D Test Team via email at 2D.Vendor.Inquiries@tax.ny.gov.

For more information on *2-D Bar Coding Standards* go to the NACTP website at: <https://www.nactp.org/index.php/income-tax/government-liaison-committee/standards-a-guidelines>

Barcode placement

Each form supported by the 2D program will contain one 2D barcode per page. The 2D barcode size and position will vary based on the form and page; the 2D barcode required placement is provided on each page of the form.

Barcode size and technical matters

- **File format** - PDF417
- **Error correction level** - Level 4
- **X (horizontal) dimension** - 10.0 mils
- **Y:X barcode ratio** - 2:1
- **White space** - There must be a 1/8-inch margin of white space around each barcode.
- **DPI** - 300 DPI minimum

Barcode layout

The data contained in a 2D barcode consists of 3 sections: Header Information, Tax Form Data, and Trailer. Each section is discussed separately below:

- **Header information:** contains identifying information and the format is consistent for all 2D barcodes.
- **Tax form data:** captures the data associated with the specific form. Software must include all taxpayer identifying information before the return is printed. The 2D barcode must include all the data that has been collected with the software regardless of the size limitation of the printed field.
- **Trailer:** each barcode must include a five-character End of Data field indicator (*EOD*). This is used to indicate that the end of data for that barcode has been reached.

Note: Every field is separated by a carriage return (<CR>), regardless of whether the field contains data or is null.

Field length and field type

Each field length and field type definition is documented in the 2D barcode specifications for each barcode; data entry in each field should be limited by the software to not exceed the defined length.

Field standards

- **Blank fields** - use a carriage return
- **Date** - MMDDYYYY, MMYYYY, YYYY, MMDD
- **"Yes/No" check boxes** - should be rendered as printed: if "Yes" box is checked, use an "X" for the sequence number assigned to the "Yes" box and a carriage return for the sequence number assigned to the "No" box. If no response (blank) use a carriage return.
- **Alphabetic characters** - Must be uppercase.
- **Fields should never be Zero filled** - To zero fill means to fill up the entire allowable length of the field with zeros. If the printed form requests that the field always contain some value or, if no value, then a single zero can be passed to the barcode.
- **Ratios and percentages** - these should match the data requirements that are established for printing on the form.
- **Special characters** - Do not use special characters unless specifically noted.
- **Direct deposit** - If the direct deposit refund option is marked, the vendor must require the taxpayer to complete the routing number and account number fields. If the electronic funds withdrawal box is marked, the vendor must require the taxpayer to complete the routing number, account number, electronic withdrawal date, and electronic withdrawal amount fields.

Required fields

Forms IT-201, IT-201-X, IT-203, IT-203-X, IT-204, IT-205, and IT-214 require the following fields:

Driver license or non-driver ID for both the primary taxpayer and spouse:

- PRIMARY DRIVERS LICENSE ID #
- PRIMARY DRIVERS LICENSE STATE
- PRIMARY DRIVERS LICENSE EXPIRATION DATE
- PRIMARY DRIVERS LICENSE ISSUE DATE
- PRIMARY DOCUMENT NUMBER
- PRIMARY DRIVERS LICENSE NOT ISSUED INDICATOR
- SPOUSE DRIVERS LICENSE ID #
- SPOUSE DRIVERS LICENSE STATE
- SPOUSE DRIVERS LICENSE EXPIRATION DATE
- SPOUSE DRIVERS LICENSE ISSUE DATE
- SPOUSE DOCUMENT NUMBER
- SPOUSE DRIVERS LICENSE NOT ISSUED INDICATOR

All tax preparer fields on professional software:

- RETURN FILING PREPARER'S NAME
- RETURN FILING FIRM NAME
- RETURN FILING PREPARER'S ADDRESS
- RETURN FILING PREPARER'S ADDRESS OVERFLOW
- RETURN FILING PREPARER'S CITY
- RETURN FILING PREPARER'S STATE
- RETURN FILING PREPARER'S ZIP 5
- RETURN FILING PREPARER'S ZIP 4
- RETURN FILING PREPARER'S NYTPRIN
- RETURN FILING PTIN or SSN
- RETURN FILING PREPARER'S EIN
- RETURN FILING EXCLUSION CODE
- RETURN FILING PREPARER'S EMAIL ADDRESS

All paper returns at creation (start time) and submission (print time):

- START DEVICE ID
- START IP ADDRESS
- START IP TIMESTAMP
- PRINT DEVICE ID
- PRINT IP ADDRESS
- PRINT IP TIMESTAMP

A free file indicator on approved free file software:

- FREE FILE INDICATOR

Guidelines for address fields

Guidelines for address fields can be found in **Publication 95** at the following location, under *Additional Specifications* https://www.tax.ny.gov/bus/efile/lnd_income_tax_home_page.htm. This site is password protected. If you need to access the site, contact the 2D Test Team via email at 2D.Vendor.Inquiries@tax.ny.gov.

Barcode printing

The vendor must make printing the 2D barcode required in their software program. The vendor must ensure that the 2D barcode cannot be altered, manipulated, or deleted.

Scanlines

Scanlines are required on all payment vouchers and must be formatted as follows:

- printed in OCR-A 10 cpi (non-bold).
- exactly 8/16" (1/2") above the bottom margin.
- contain required information in chart below.

Field name	No. of characters	Description
Form ID	10	See following Form Identification (ID) Codes section.
Blank spaces	2	
SSN or EIN	9	Nine-character Social Security number, EIN, or TF ID
Blank spaces	2	
Check digit	1	See following Check Digit section.

Example of scanline:

Form identification (ID) codes

The form ID must be:

- printed in OCR-A font at 10 characters per inch, non-bold (10 cpi).
- exactly 8/16" (1/2") from the left margin and exactly 8/16" from the bottom margin with at least 3/8" clearance around them.
- 10 digits in length, formatted as follows:
 - 1-3, indicate the form type.
 - 4, indicates the page number of the form.
 - 5-6, indicate the last two digits of the tax year of the form.
 - 7-10, indicate your software's NACTP or NYSDTF four-digit assigned vendor code.

Check digit

The check digit is calculated using the taxpayer identification number in **modulus 9 routine**.

Each of the 9 characters is multiplied by a value corresponding to its respective position within the 9-character string. The products of these 9 multiplications are summed. The sum is then divided by 9. The remainder of this division is then subtracted from the modulus 9, yielding the check digit.

If a taxpayer has a temporary TF or NY prefix number (these two letters plus seven numerals), use the following numbers in place of the letters when computing the check digit: T=29, F=15, N=23, Y=34

Examples of check digit calculations:

Example 1: ID number (SSN) 255-76-8432

	2		5		5		7		6		8		4		3		2		
	x 1		x 2		x 3		x 4		x 5		x 6		x 7		x 8		x 9		
	2	+	10	+	15	+	28	+	30	+	48	+	28	+	24	+	18	=	203

$203 \div 9 = 22$ with remainder of 5 and $9 - 5 = 4$ Check digit = 4

The scan line (with check digit) would be: **255768432 4**

Example 2: ID number NY2349876 (assigned by the Tax Department)

	23		34		2		3		4		9		8		7		6		
	x 1		x 2		x 3		x 4		x 5		x 6		x 7		x 8		x 9		
	23	+	68	+	6	+	12	+	20	+	54	+	56	+	56	+	54	=	349

$349 \div 9 = 38$ with remainder of 7 and $9 - 7 = 2$ Check digit = 2

The scan line (with check digit) would be: **NY2349876 2**

Section 6: Websites

Forms bulletin board for practitioners

Publications, Guides, preliminary and final forms can be found at the *Forms Bulletin Board for Practitioners (Bulletin Board)* at: <https://www.tax.ny.gov/draftforms/incomefinal.htm>. This site is password protected. If you need to access the site, contact the 1D Test Team via email at 1D.Vendor.Inquiries@tax.ny.gov.

Driver license and non-driver ID

Preparer: <https://www.tax.ny.gov/tp/driverlicense.htm>

Individual: www.tax.ny.gov/pit/efile/individual-driver-license.htm

Forms and instructions for previous tax years

Unchanged forms with past year's revision dates can be found on our public website at: https://www.tax.ny.gov/forms/prvforms/prev_year.htm

Form changes and updates

Check regularly for updates at: www.tax.ny.gov/forms/income_up_to_date_info.htm

NACTP

For general information on *Tax Form Design and Standards* and *2D Barcode Standards* go to the NACTP website at: <https://www.nactp.org/index.php/income-tax/government-liaison-committee/standards-a-guidelines>

Section 7: Common errors

Common 1D testing errors:

- Incorrect text justification and formatting
- Changing “back” to “page 2” in form text
- Changing “see instructions on back” to “see instructions on page 2” in form text
- Placement and alignment of letters and numbers in data entry box
- Using commas and dashes in data entry fields
- Missing data on form schedules and lines on variable tests and not reporting that these sections of the form are unsupported

Common 2D testing errors:

- The vendor did not populate any data in a field that NYSDTF requested. (This includes checkboxes)
- The vendor did not abide by 2D specifications provided by NYSDTF.
- The vendor populates “See Attachment (and/or) See Statement” in Dependent Exemption Information.
- The vendor populates data in a field on the PDF test form, but it is not in the barcode.
- The vendor populates data in the barcode that is not on the PDF test form.

Section 8: Frequently asked questions

Q1. Must a taxpayer send federal Form W-2 with their NYS paper return?

A1. No, the taxpayer must only send Form IT-2, *Summary of W-2 Statements*.

Q2. Is there a deadline for paper vendor testing?

A2. No, there is no deadline for paper vendor testing. However, the 14-business day turn around for testing only applies to tests received prior to December 11, 2020.