FUJITSU

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RFID Label Design and Encoding Management Pro

BTW Files Editing Guide

March 2017
Version 1.30

Preface

This document explains how to create label design and encode data by the RFID Label Design and Encoding Management Pro (hereafter referred to as "this tool"). Be sure to read this document before using this tool.

➔ Please read the ***First Step Guide*** and the ***User's Guide for RFID Integrated Label*** first.

The ***User's Guide for RFID Integrated Label*** is available at the following URL.
www.fujitsu.com/global/solutions/ait/tags

■ Abbreviations and generic terms used in documents for Fujitsu RFID Integrated Label Solution

The documents use the following abbreviations and generic terms.

Name	Abbreviation used in this document
Microsoft® Windows® 7 Professional	Windows 7
Microsoft® Windows® 8.1 Professional	"Windows 8.1"
Microsoft® Windows® 10 Professional	"Windows 10"
Terminals where Windows 7, Windows 8.1, or Windows 10 has been installed Personal computer	PC
Reader device for 2D barcode	"2D reader"
Reader/writer devices	Reader device
RFID tags	Tag
Fujitsu's RFID Integrated Label - 8Kbyte (Large/Medium/Small)	"Large capacity RFID tag" or "high memory tag"
Fujitsu's RFID Integrated Label - 1Kbyte (Large/Medium/Small) Fujitsu's 2-kilobit RFID tags	Tag

■ Trademarks

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■ ATA (Air Transport Association of America) Spec2000 Chapter9-5

- This tool is designed to read and write data from and to tags in compliance with the specification for Radio Frequency Identification (RFID) on Parts in ATA Spec2000 Chapter 9-5.

■ High Risk Activity

- This product is designed and manufactured as contemplated for general use, including without limitation, general office use, personal use and household use, but is not designed and manufactured as contemplated for use accompanying fatal risks or dangers that, unless extremely high safety is secured, could lead directly to death, personal injury, severe physical damage or other loss (hereinafter called "High Safety Required Use"), including without limitation, nuclear reaction control, aircraft flight control, air traffic control, mass transport control, life support, and weapon launch control . The customer shall not use this product without securing the sufficient safety required for the High Safety Required Use.

■ Notes on export procedures

- When exporting or providing this product and this document, check the regulations under the Foreign Exchange and Foreign Trade Law and the laws and regulations relating to US export control, and complete the necessary procedures.

■ Screenshots and illustrations

- The screenshots and illustrations in this document are only examples, and the actual screens may be slightly different depending on the environment that you are using.
- The screenshots used in the explanations in this document are from a Windows 7 environment.

■ Other Notes

- No part of this document may be reproduced or reused for other purposes without the express written permission of Fujitsu Limited.
- The content of this document may change without prior notice.

■ Revision history

Edition	Data issued	Changes
Version 1.00	November 2014	First version released
Version 1.10	March 2015	Changed folder path for storing commission data file
Version 1.20	September 2015	Add Commissioning from 2D and Batch Commissioning
Version 1.21	April 2016	Changed folder path for storing commission data file
Version 1.22	October 2016	For the first enhancement in 2016
Version 1.30	March 31 2017	Enhancement for ATA Spec 2000 Rev.2016 support.

Contents

1 Setup Procedure

1.1 Overview

This section explains the steps how to create commission data using each of the following applications of Fujitsu RFID Label Design and Encoding Management Pro and encode the data using BarTender.

(1) Commissioning by Barcode Scanning

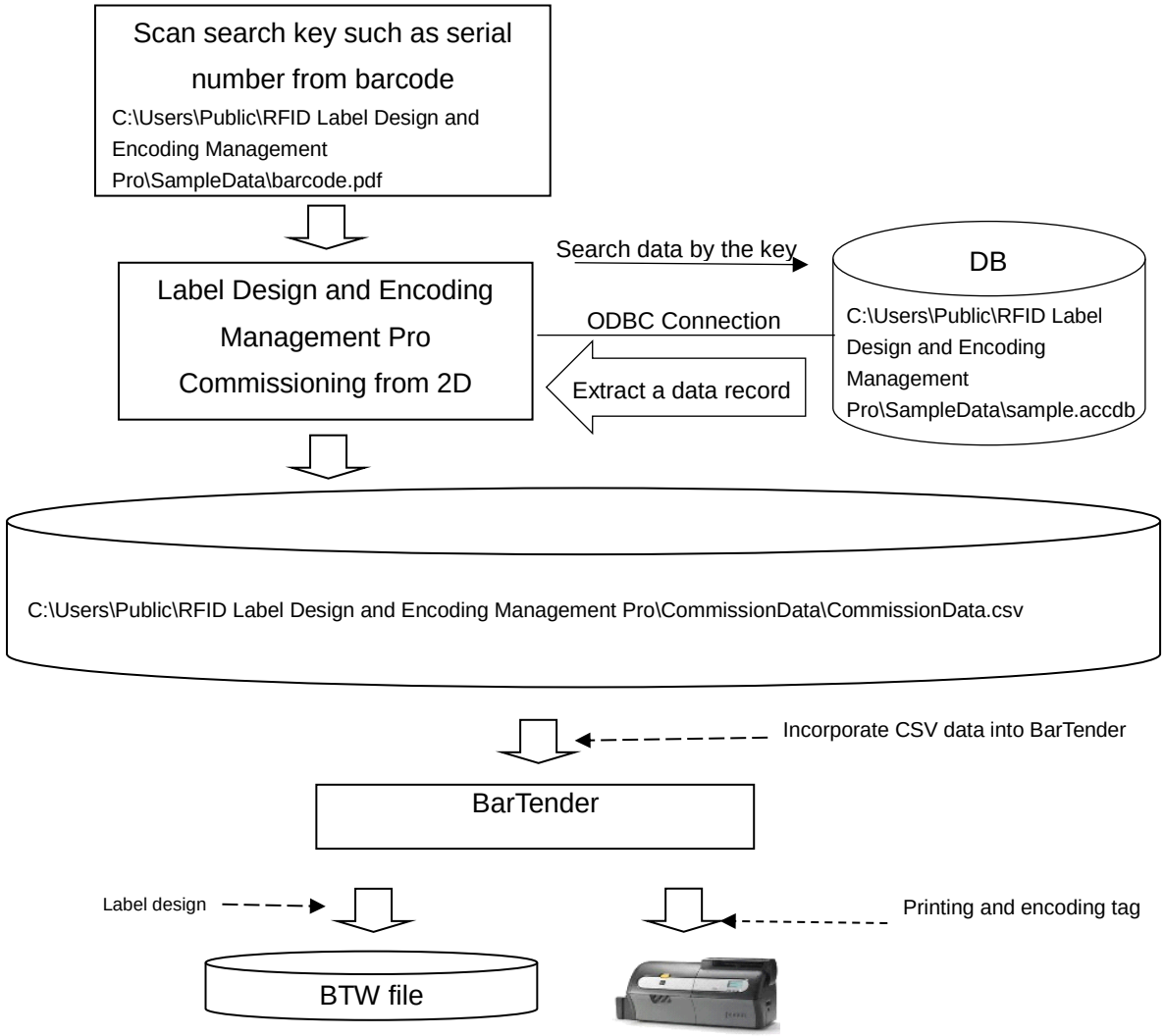
(2) Batch Commissioning

(3) Commissioning from Integrated Sources

(4) Manual Input

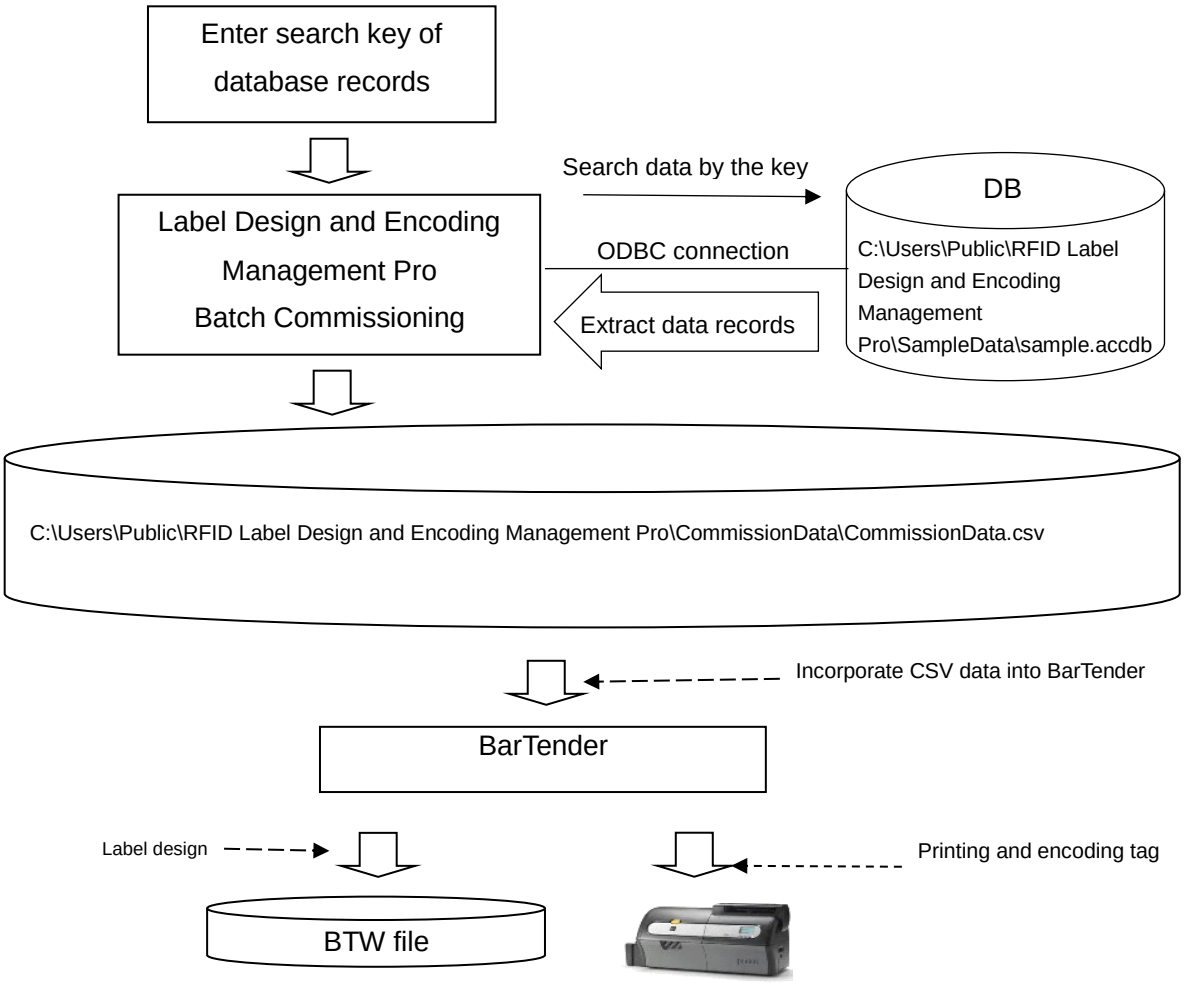
1.1.1 Commissioning by Barcode Scanning

This application enables to create commission data by scanning barcode which contains the search key. After scanning barcode, this application automatically searches and extracts a data record from a database or barcode data, and sets it as commission data.



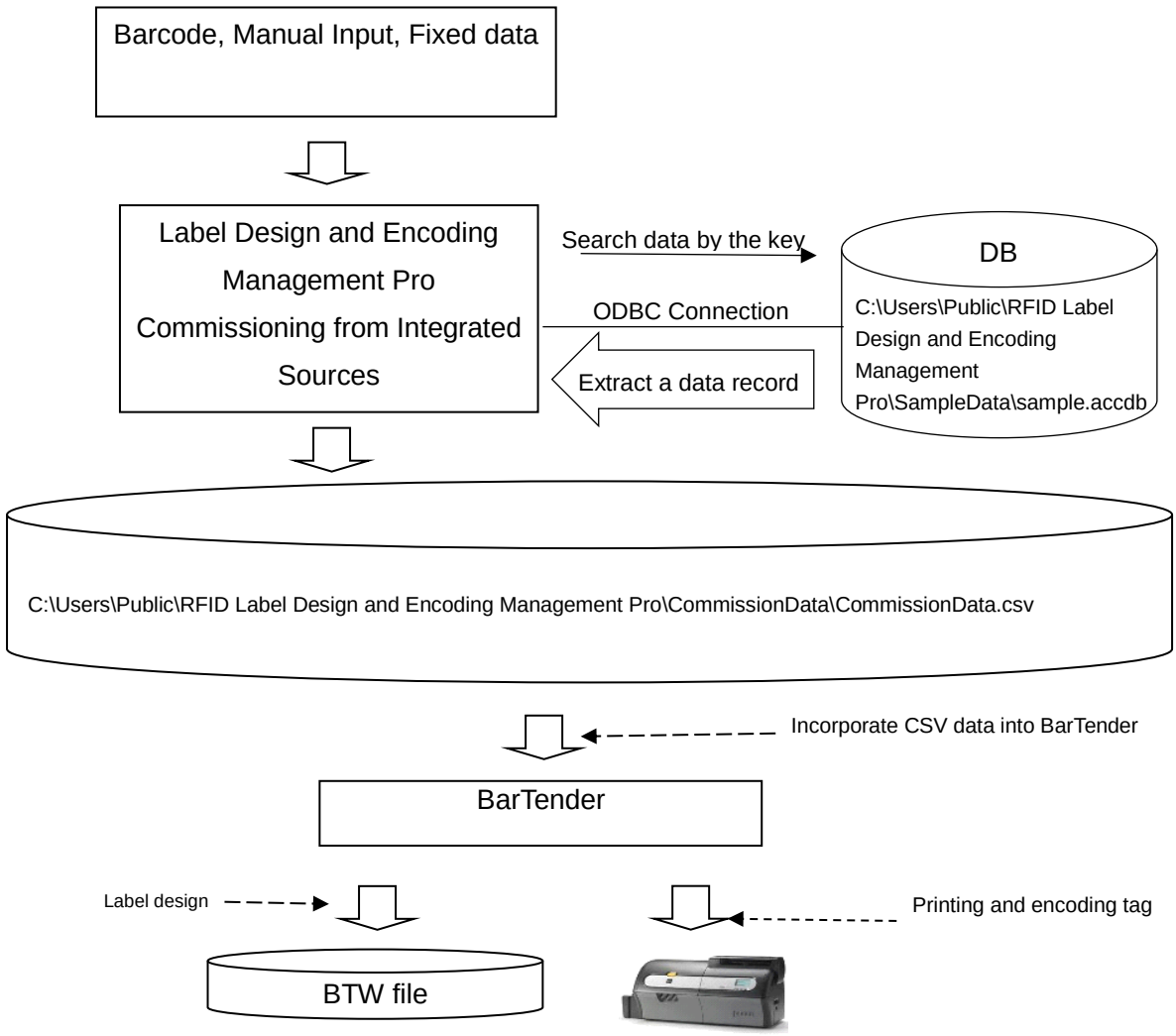
1.1.2 Batch Commissioning

This application extracts multiple data records by search key from a database and creates commission data for multiple tags one time.



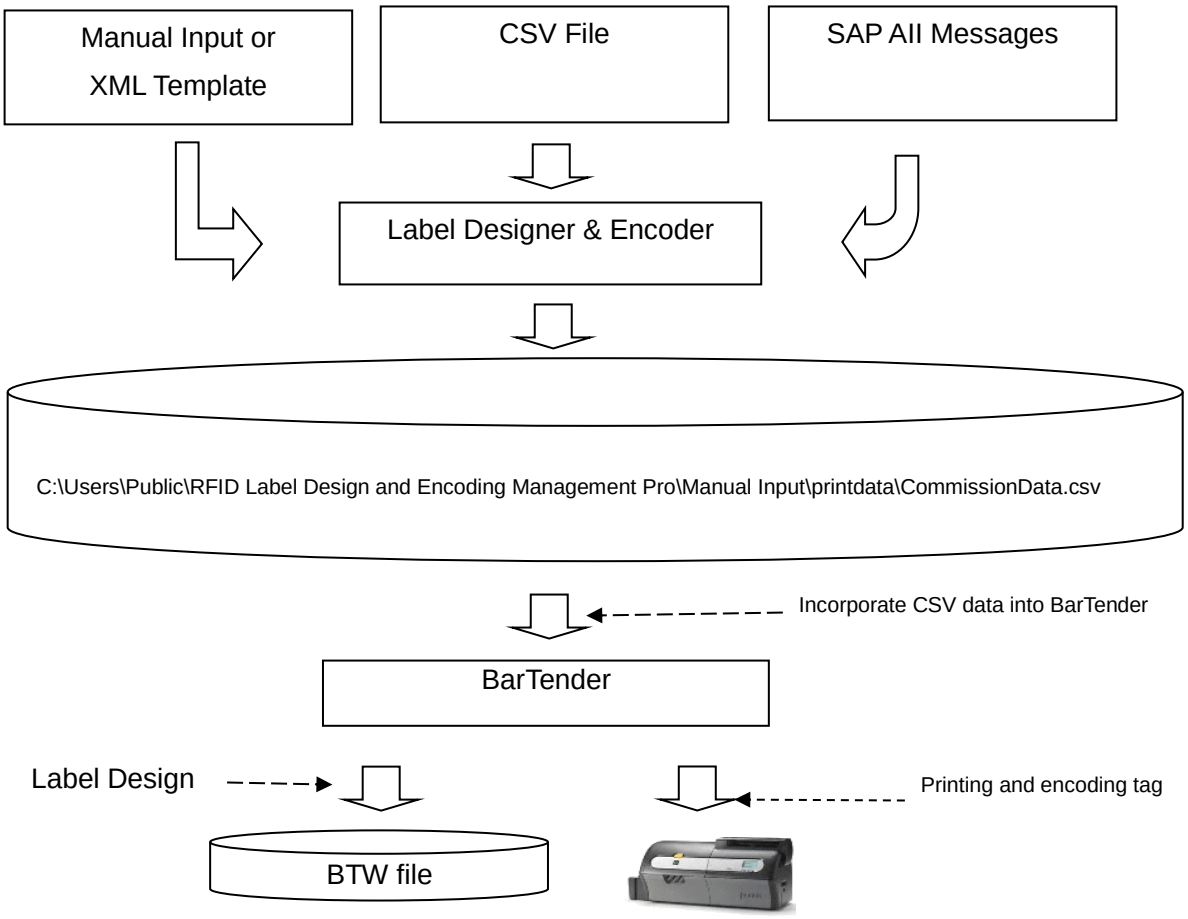
1.1.3 Commissioning from Integrated Sources

This application enables to create commission data from various data sources such as barcode, database, manual entry, and fixed data.



1.1.4 Manual Input

This application creates commission data based on the data input by manual or CSV/XML file.



1.2 Description of CommissionData.csv

This section explains the contents of the csv file (Commission.csv) generated with Fujitsu RFID Label Design and Encoding Management Pro. There are 2 types of the format according to each of the applications.

(1) CommissionData.csv for Commissioning by Barcode Scanning, Batch Commissioning, and Commissioning from Integrated Sources

(2) CommissionData.csv for Manual Input

1.2.1 CommissionData.CSV for Commissioning by Barcode Scanning, Batch Commissioning, and Commissioning from Integrated Sources

1.2.1.1 Multi Record

“Writing Tag” means the data is written on tag by BarTeder BTW file.

“Offset Information” means the data indicates the address of User area where the data is written.

“Write Protect Blocks” indicates the record needs to be configured as locked data on BarTender BTW file

・ Multi Record

Header	Type	Description	Writing Tag	Offset Information	Write Protect Blocks
Version	Information about the CSV file	ToC Version: 4.0 or 4.1			
Tag Type		Tag Type: Multi-Record (fixed)			
readerID	Printer control	Data for printer control			
format					
jobName					
quantity					
AFI	EPC	Data of AFI			
EPC		Data of EPC	✓		
HRDO	User area	Offset of ATA TocHeader and RD		✓	
HRD		Data of ATA TocHeader and RD	✓		✓
BR1O		Offset of ATA Birth Record		✓	
BR1		Data of ATA Birth Record	✓		✓
BR2O		Offset of ATA Birth Record		✓	
BR2		Data of ATA Birth Record	✓		✓
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BRnO		Offset of ATA Birth Record		✓	
BRn		Data of ATA Birth Record	✓		✓
SRO		Offset of ATA Scratchpad		✓	

SR		Data of ATA Scratchpad	✓		
SRCRCO		Offset of ATA Scratchpad CRC		✓	
SRCRC		Data of ATA Scratchpad CRC	✓		
CDR1O		Offset of ATA CurrentData Record		✓	
CDR1		Data of ATA CurrentData Record	✓		
CDR2O		Offset of ATA CurrentData Record		✓	
CDR2		Data of ATA CurrentData Record	✓		
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CDRnO		Offset of ATA CurrentData Record		✓	
CDRn		Data of ATA CurrentData Record	✓		
CDRCRCO		Offset of ATA CurrentData Record CRC		✓	
CDRCRC		Data of ATA CurrentData Record CRC	✓		
TrailerO		Offset of ATA Trailer		✓	
Trailer		Data of ATA Trailer	✓		
2D	Barcode	Data of payload for Birth Record			
BR_MFR	TEI (default Birth Record)	TEI's Input Data			
BR_SPL					
BR_SER					
BR_SEQ					
BR_UCN					
BR_PNO					
BR_UIC					
BR_PDT					
BR_DMF					
BR_ICC					
BR_WGT					
BR_UNT					
BR_HAZ1					
BR_HAZ2					
BR_HAZ3					
BR_ESD					
BR_EXP					
BR_LLE					
BR_LOT					
BR_LTN					
BR_CNT					
BR_ECC					
BR_SWI					
BR_OPN					
BR_TDN					
BR_PML					
BR_NSN					
BR_FAB					
CDR_PNR	TEI (default Current Data Record)	TEI's Input Data			
CDR_PML					
CDR_OPN					
CDR_CND					
CDR_EXP					
CDR_TDN					
CDR_HAZ1					
CDR_HAZ2					
CDR_HAZ3					
CDR_ONR					
CDR_LAC					
CDR_ASN					
CDR_DOW	TEI	TEI's Input Data			

CDR_DTT	(added)				
CDR_DOH					
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Search key	Search key	Search key to extract data record (s) for the Batch Commission, Commission by Barcode Scanning, and Commissioning from Integrated Sources applications.			
EPC-Filter Value	EPC	Filter Value			
EPC-Manager Number		Manager Number			
EPC-Original Part Number		Original Part Number			
EPC-Alphanumeric Serial Number		Alphanumeric Serial Number			
Print information[01]	Print information	Information printed on label			
Print information[02]		Information printed on label			
Print information[03]		Information printed on label			
Print information[04]		Information printed on label			
Print information[05]		Information printed on label			
Print information[06]		Information printed on label			
Print information[07]		Information printed on label			
Print information[08]		Information printed on label			
Print information[09]		Information printed on label			
Print information[10]		Information printed on label			

♦**Reference**

- Data in the various records may have to be written with an offset from the beginning of the record area. (1word=2byte).
- The data written to the tag is expressed in the hexadecimal representation.
- At least one Birth Record and Current Data Record exist. Depending on the size of the input data, records may be broken down in various segments in the commissioning data, e.g., Birth Record split into BR1, BR2, …etc.)
- Contents in the CSV file (CommissionData.csv) can be printed.
- When Protect blocks is checked (in the table above), it is necessary to do lock the corresponding record on the tag.
- It is necessary to lock the EPC area, Access Password and Kill Password. Refer to *Installation Guide - RFID Label Design and Encoding Management Pro* for details.

1.2.1.2 Dual Record

Dual Record

Header	Type	Description	Writing Tag	Offset Information	Write Protect Blocks
Version	Informati on about the CSV file	ToC Version: 4.0 or 4.1			
Tag Type		Tag Type: Dual-Record (fixed)			
readerID	Printer control	Data for printer control			
format					
jobName					
quantity					
AFI	EPC	Data of AFI			
EPC		Data of EPC	✓		
HRDO	User area	Offset of ATA TocHeader and RD		✓	
HRD		Data of ATA TocHeader and RD	✓		✓
BR1O		Offset of ATA Birth Record		✓	
BR1		Data of ATA Birth Record	✓		✓
BR2O		Offset of ATA Birth Record		✓	
BR2		Data of ATA Birth Record	✓		✓
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BRnO		Offset of ATA Birth Record		✓	
BRn		Data of ATA Birth Record	✓		✓
LR1O		Offset of ATA Lifecycle Record		✓	
LR1		Data of ATA Lifecycle Record	✓		
LR2O		Offset of ATA Lifecycle Record		✓	
LR2		Data of ATA Lifecycle Record	✓		
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LRnO		Offset of ATA Lifecycle Record		✓	
LRn		Data of ATA Lifecycle Record	✓		
LRCRCO		Offset of ATA Lifecycle Record CRC		✓	
LRCRC		Data of ATA Lifecycle Record CRC	✓		
TrailerO		Offset of ATA Trailer		✓	
Trailer		Data of ATA Trailer	✓		
2D	Barcode	Data of payload for Birth Record			
BR_MFR	TEI (default Birth Record)	TEI's Input Data			
BR_SPL					
BR_SER					
BR_SEQ					
BR_UCN					
BR_PNO					
BR_UIC					
BR_PDT					
BR_DMF					
BR_ICC					
BR_WGT					
BR_UNT					
BR_HAZ1					
BR_HAZ2					

BR_HAZ3					
BR_ESD					
BR_EXP					
BR_LLE					
BR_LOT					
BR_LTN					
BR_CNT					
BR_ECC					
BR_SWI					
BR_OPN					
BR_TDN					
BR_PML					
BR_NSN					
BR_FAB					
BR_MFR					
BR_SPL					
BR_SER					
BR_SEQ					
BR_UCN					
BR_PNO					
BR_UIC					
BR_PDT					
BR_DMF					
BR_ICC					
BR_WGT					
BR_UNT					
BR_HAZ1					
BR_HAZ2					
BR_HAZ3					
BR_ESD					
BR_EXP					
BR_LLE					
BR_LOT					
BR_LTN					
BR_CNT					
BR_ECC					
BR_SWI					
BR_OPN					
BR_TDN					
BR_NSN					
BR_FAB					
LR_PNR	TEI (default Lifecycle Record)	TEI's Input Data			
LR_PML					
LR_OPN					
LR_CND					
LR_EXP					
LR_DOH					
LR_TDN					
LR_HAZ					
LR_LAC					
LR_MNC					
LR_DOW	TEI (added)	TEI's Input Data			
LR_DTT					
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Search key	Search key	Search key to extract data record (s) for the Batch Commission, Commissioning by Barcode Scanning, and Commissioning from Integrated Sources applications.			
EPC-Filter Value	EPC	Filter Value			
EPC-Manager Number		Manager Number			
EPC-Original Part Number		Original Part Number			
EPC-Alphanumeric Serial Number		Alphanumeric Serial Number			
Print information[01]	Print information	Information printed on label			
Print information[02]		Information printed on label			
Print information[03]		Information printed on label			
Print information[04]		Information printed on label			
Print information[05]		Information printed on label			
Print information[06]		Information printed on label			
Print information[07]		Information printed on label			
Print information[08]		Information printed on label			
Print information[09]		Information printed on label			
Print information[10]		Information printed on label			

♦**Reference**

- Data in the various records may have to be written with an offset from the beginning of the record area. (1word=2byte).
- The data written to the tag is expressed in the hexadecimal representation.
- At least one Birth Record and Lifecycle Record exist. Depending on the size of the input data, records may be broken down in various segments in the commissioning data, e.g., Birth Record split into BR1, BR2, …etc.)
- Contents in the CSV file (CommissionData.csv) can be printed.
- When Protect blocks is checked (in the table above), it is necessary to do lock the corresponding record on the tag.
- It is necessary to lock the EPC area, Access Password and Kill Password. Refer to *Installation Guide - RFID Label Design and Encoding Management Pro* for details.

1.2.1.3 Single Birth Record

Single Birth Record

Header	Type	Description	Writing Tag	Offset Information	Write Protect Blocks
Version	Information about the CSV file	ToC Version: 4.0 or 4.1			
Tag Type		Tag Type: Dual-Record (fixed)			
readerID	Printer control	Data for printer control			
format					
jobName					
quantity					
AFI	EPC	Data of AFI			
EPC		Data of EPC	✓		
BR1O	User area	Offset of ATA Birth Record		✓	
BR1		Data of ATA Birth Record	✓		✓
BR2O		Offset of ATA Birth Record		✓	
BR2		Data of ATA Birth Record	✓		✓
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BRnO		Offset of ATA Birth Record		✓	
BRn		Data of ATA Birth Record	✓		✓
2D	Barcode	Data of payload for Birth Record			
BR_MFR	TEI (default Birth Record)	TEI's Input Data			
BR_SPL					
BR_SER					
BR_SEQ					
BR_UCN					
BR_PNO					
BR_UIC					
BR_DMF					
BR_HAZ1					
BR_HAZ2					
BR_HAZ3					
BR_EXP					
BR_LLE					
BR_PNR					
BR_PML					
Search key	Search key	Search key to extract data record (s) for the Batch Commission, Commissioning by Barcode Scanning, and Commissioning from Integrated Sources applications.			
EPC-Filter Value	EPC	Filter Value			
EPC-Manager Number		Manager Number			
EPC-Original Part Number		Original Part Number			
EPC-Alphanumeric Serial Number		Alphanumeric Serial Number			
Print information[01]	Print informati	Information printed on label			

Print information[02]	on	Information printed on label			
Print information[03]		Information printed on label			
Print information[04]		Information printed on label			
Print information[05]		Information printed on label			
Print information[06]		Information printed on label			
Print information[07]		Information printed on label			
Print information[08]		Information printed on label			
Print information[09]		Information printed on label			
Print information[10]		Information printed on label			

1.2.1.4 Single Utility Record

Single Utility Record

Header	Type	Description	Writing Tag	Offset Information	Write Protect Blocks
Version	Information about the CSV file	ToC Version: 4.0 or 4.1			
Tag Type		Tag Type: Dual-Record (fixed)			
readerID	Printer control	Data for printer control			
format					
jobName					
quantity					
AFI	EPC	Data of AFI			
EPC		Data of EPC	✓		
UR1O	User area	Offset of ATA TocHeader and RD		✓	
UR1		Data of ATA TocHeader and RD	✓		✓
UR2O		Offset of ATA Birth Record		✓	
UR2		Data of ATA Birth Record	✓		✓
UR3O		Offset of ATA Birth Record		✓	
UR3		Data of ATA Birth Record	✓		✓
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URnO		Offset of ATA Birth Record		✓	
URn		Data of ATA Birth Record	✓		✓
2D	Barcode	Data of payload for Birth Record			
UR_SPL	TEI (default Utility Record)	TEI's Input Data			
UR_UCN					
UR_PNO					
UR_PNR					
UR_UIC					
UR_DMF					
UR_PML					
UR_LAC					
Search key	Search key	Search key to extract data record (s) for the Batch Commission, Commissioning by Barcode Scanning, and Commissioning from Integrated Sources applications.			
EPC-Filter Value	EPC	Filter Value			
EPC-Manager Number		Manager Number			
EPC-Original Part Number		Original Part Number			
EPC-Alphanumeric Serial Number		Alphanumeric Serial Number			
Print information[01]	Print information	Information printed on label			
Print information[02]		Information printed on label			

Print information[03]		Information printed on label			
Print information[04]		Information printed on label			
Print information[05]		Information printed on label			
Print information[06]		Information printed on label			
Print information[07]		Information printed on label			
Print information[08]		Information printed on label			
Print information[09]		Information printed on label			
Print information[10]		Information printed on label			

1.2.2 CommissionData.CSV for Manual Input

1.2.2.1 Multi Record

"Writing Tag" means the data is written on tag by BarTeder BTW file.

"Offset Information" means the data indicates the address of User area where the data is written.

"Write Protect Blocks" indicates the record needs to be configured as locked data on BarTender BTW file

・ Multi Record

Header	Type	Description	Writing Tag	Offset Information	Write Protect Blocks
MFR/SPL	TEI	TEI's Input Data			
SER/SEQ/UCN					
PNO					
UIC					
PDT					
DMF					
ICC					
WGT					
UNT					
HAZ(1)					
HAZ(2)					
HAZ(3)					
ESD					
EXP					
LLE					
LOT/LTN					
CNT					
ECC					
SWI					
OPN					
TDN					
PML					

NSN					
FAB					
DTT					
DOW					
DOH					
readerID	Printer Control	Data for printer control			
format					
jobName					
quantity					
2D	Barcode	Data of payload for Birth Record			
AFI	EPC	Data of AFI			
EPC		Data of EPC	✓		
HRDO	User Area	Offset of ATA TocHeader and RD		✓	
HRD		Data of ATA TocHeader and RD	✓		✓
HRDSS		Offset of ATA TocHeader and RD (Lock)			
HRDSSR		Data of ATA TocHeader and RD (Lock)			
BR1O		Offset of ATA Birth Record		✓	
BR1		Data of ATA Birth Record	✓		✓
BR1SS		Offset of ATA Birth Record (Lock)			
BR1SSR		Data of ATA Birth Record (Lock)			
BR2O		Offset of ATA Birth Record		✓	
BR2		Data of ATA Birth Record	✓		✓
BR2SS		Offset of ATA Birth Record (Lock)			
BR2SSR		Data of ATA Birth Record (Lock)			
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BRnO		Offset of ATA Birth Record		✓	
BRn		Data of ATA Birth Record	✓		✓
BRnSS		Offset of ATA Birth Record (Lock)			
BRnSSR		Data of ATA Birth Record (Lock)			
SRO		Offset of ATA Scratchpad		✓	
SR		Data of ATA Scratchpad	✓		
SRCRCO		Offset of ATA Scratchpad CRC		✓	
SRCRC		Data of ATA Scratchpad CRC	✓		
CDR1O		Offset of ATA CurrentData Record		✓	
CDR1		Data of ATA CurrentData Record	✓		
CDR2O		Offset of ATA CurrentData Record		✓	
CDR2		Data of ATA CurrentData Record	✓		
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CDRnO		Offset of ATA CurrentData Record		✓	
CDRn		Data of ATA CurrentData Record	✓		
CDRCRCO		Offset of ATA CurrentData Record		✓	
CDRCRC		Data of ATA CurrentData Record	✓		
TrailerO		Offset of ATA Trailer		✓	
Trailer		Data of ATA Trailer	✓		

♦**Reference**	・ Data in the various records may have to be written with an offset from the beginning of the record area. (1word=2byte). ・ The data written to the tag is expressed in the hexadecimal representation. ・ At least one Birth Record and Current Data Record exist. Depending on the size of the input data, records may be broken down in various segments in the commissioning data, e.g., Birth Record split into BR1, BR2, …etc.) ・ Contents in the CSV file (CommissionData.csv) can be printed. ・ When Protect blocks is checked (in the table above), it is necessary to do lock the corresponding record on the tag. ・ It is necessary to lock the EPC area, Access Password and Kill Password. Refer to *Installation Guide - RFID Label Design and Encoding Management Pro* for details.

1.2.3 Dual Record

- Dual Record

Header	Type	Description	Writing Tag	Offset Information	Write Protect Blocks
MFR/SPL	TEI	TEI's Input Data			
SER/SEQ/UCN					
PNO					
UIC					
PDT					
DMF					
ICC					
WGT					
UNT					
HAZ(1)					
HAZ(2)					
HAZ(3)					
ESD					
EXP					
LLE					
LOT/LTN					
CNT					
ECC					
SWI					
OPN					
TDN					
CND					
NSN					
FAB					
DTT					
DOW					
DOH					
readerID	Printer Control	Data for printer control			
format					
jobName					
quantity					
2D	Barcode	Data of payload for Birth Record			
AFI	EPC	Data of AFI			
EPC		Data of EPC	✓		
HRDO	User Area	Offset of ATA TocHeader and RD		✓	
HRD		Data of ATA TocHeader and RD	✓		✓
HRDSS		Offset of ATA TocHeader and RD (Lock)			
HRDSSR		Data of ATA TocHeader and RD (Lock)			
BR1O		Offset of ATA Birth Record		✓	
BR1		Data of ATA Birth Record	✓		✓
BR1SS		Offset of ATA Birth Record (Lock)			
BR1SSR		Data of ATA Birth Record (Lock)			
BR2O		Offset of ATA Birth Record		✓	
BR2		Data of ATA Birth Record	✓		✓
BR2SS		Offset of ATA Birth Record (Lock)			
BR2SSR		Data of ATA Birth Record (Lock)			
. . . .		. . . .			

BRnO		Offset of ATA Birth Record		✓	
BRn		Data of ATA Birth Record	✓		✓
BRnSS		Offset of ATA Birth Record (Lock)			
BRnSSR		Data of ATA Birth Record (Lock)			
LR1O		Offset of ATA Scratchpad		✓	
LR1		Data of ATA Scratchpad	✓		
LR2O		Offset of ATA Scratchpad CRC		✓	
LR2		Data of ATA Scratchpad CRC	✓		
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LRnO		Offset of ATA CurrentData Record		✓	
LRn		Data of ATA CurrentData Record	✓		
LRCRCO		Offset of ATA CurrentData Record		✓	
LRCRC		Data of ATA CurrentData Record	✓		
TrailerO		Offset of ATA Trailer		✓	
Trailer		Data of ATA Trailer	✓		

♦**Reference**

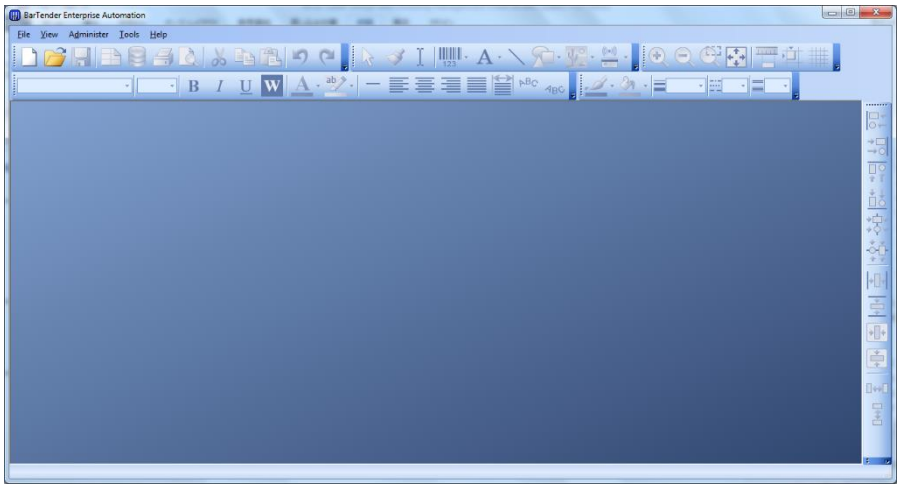
- Data in the various records may have to be written with an offset from the beginning of the record area. (1word=2byte).
- The data written to the tag is expressed in the hexadecimal representation.
- At least one Birth Record and Lifecycle Record exist. Depending on the size of the input data, records may be broken down in various segments in the commissioning data, e.g., Birth Record split into BR1, BR2, …etc.)
- Contents in the CSV file (CommissionData.csv) can be printed.
- When Protect blocks is checked (in the table above), it is necessary to do lock the corresponding record on the tag.
- It is necessary to lock the EPC area, Access Password and Kill Password. Refer to *Installation Guide - RFID Label Design and Encoding Management Pro* for details.

1.3 Create Label Design and Encode Data

This section explains the procedure how to design label and to encode data.

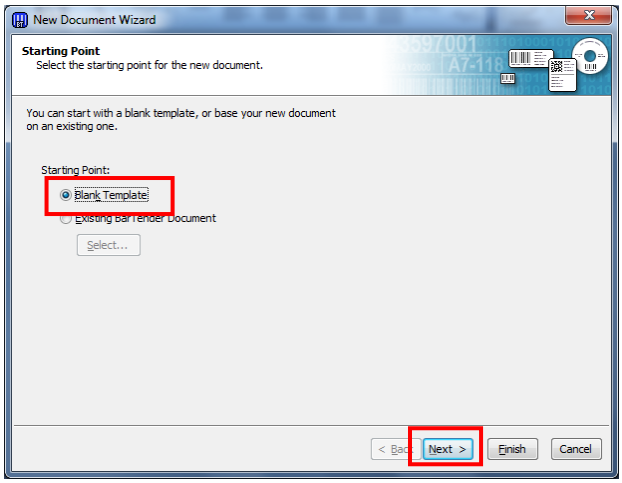
1.3.1 Create Layout

1. Start **BarTender**.

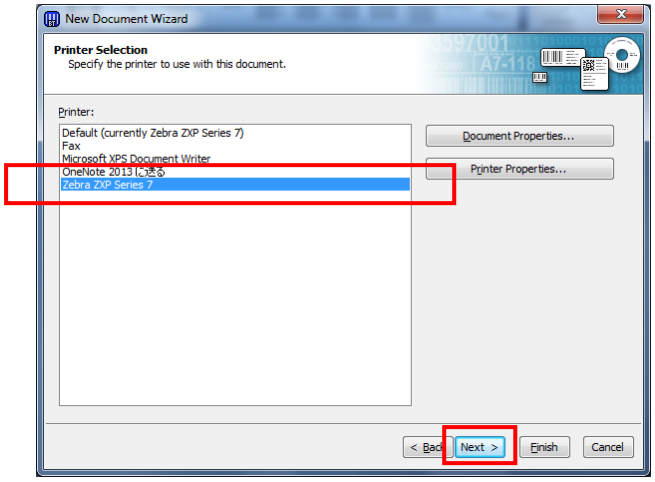


♦**Reference** ・ BarTender starts when "Label Designing" button of the Launcher screen of Label Design and Encoding Management Pro is clicked.

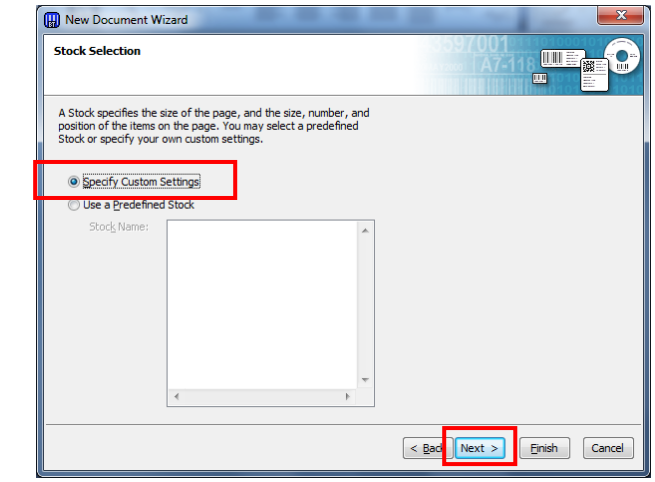
2. Select the **New** from File menu and then Wizard screen is displayed. Select the **Blank Template** and click the **Next**.



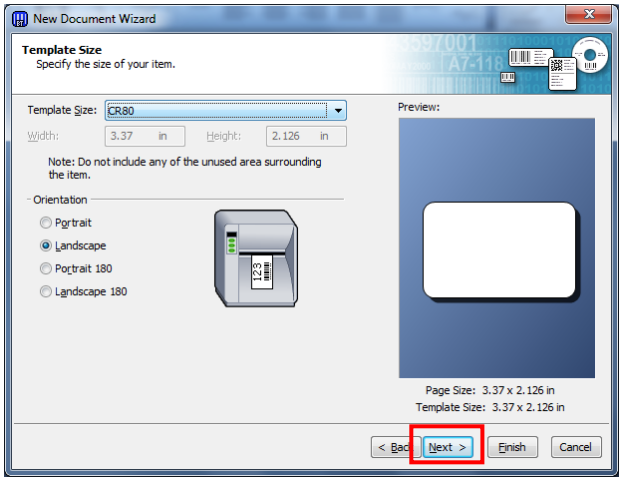
3. Select the **Zebra ZXP Series 7** and click the **Next**.



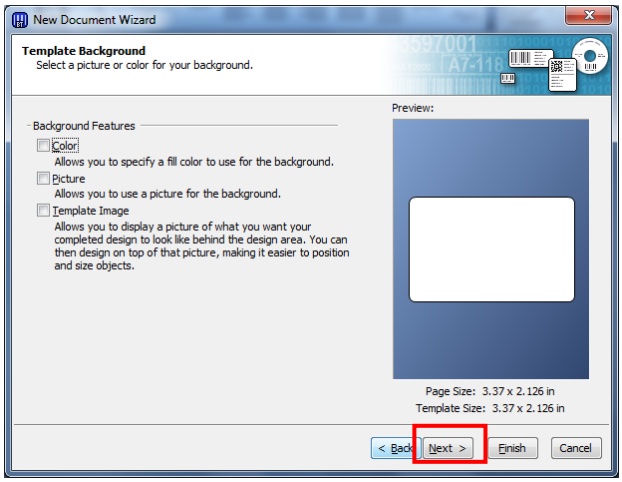
4. Select the **Specify Custom Settings** and click the **Next**.



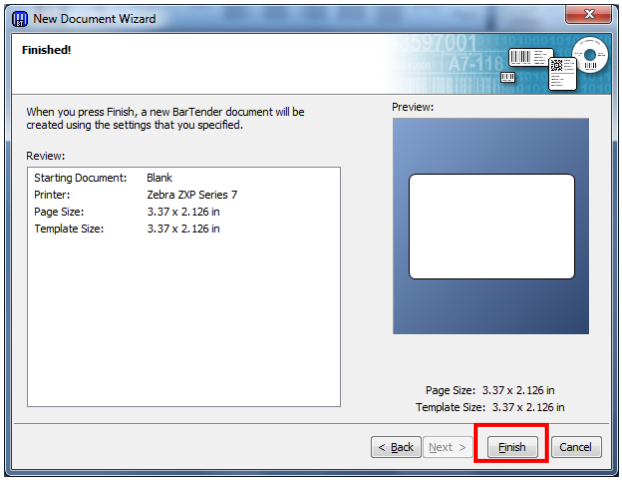
5. Click the **Next**.



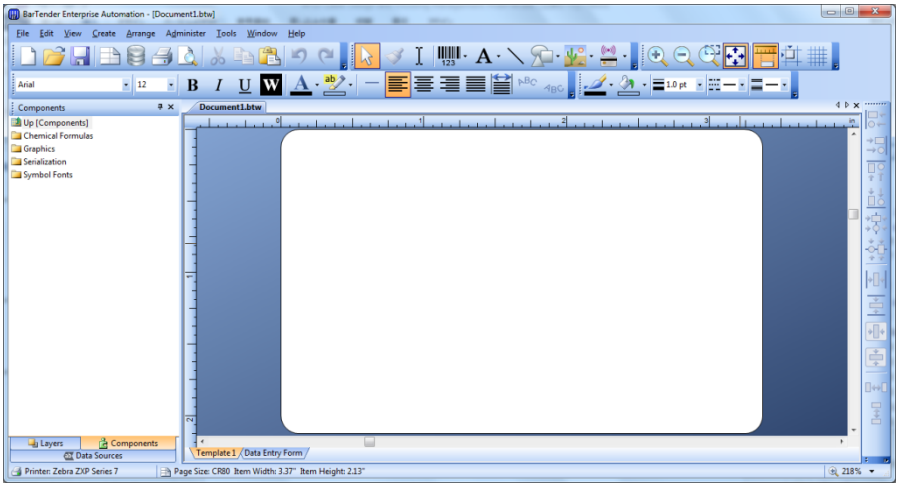
6. Click the **Next**.



7. Click the **Finish**.



8. New (Blank) Label Design Layout is displayed.

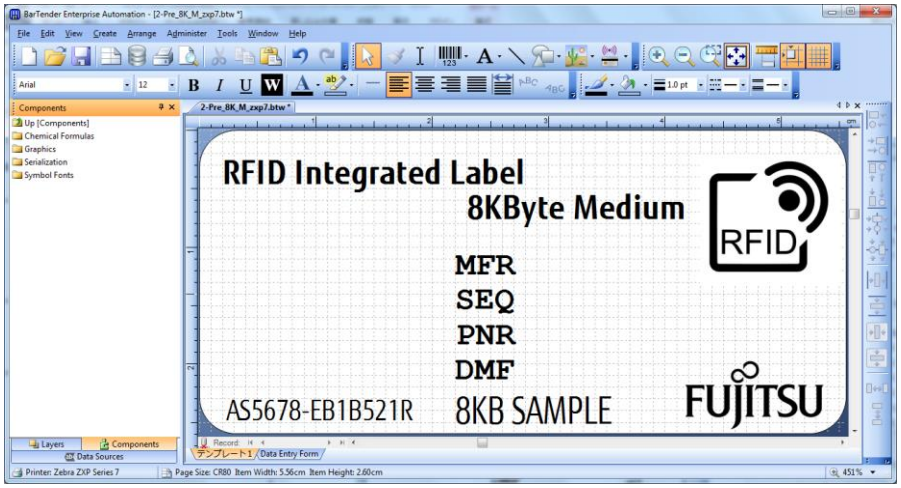


1.3.2 Database Connection

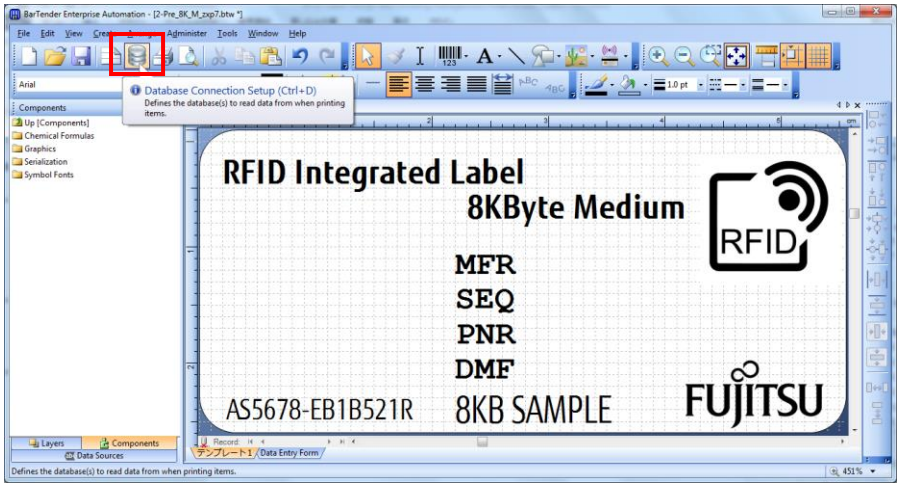
1. Design Layout.

♦Reference	・	Please refer to the manual of BarTender for details.

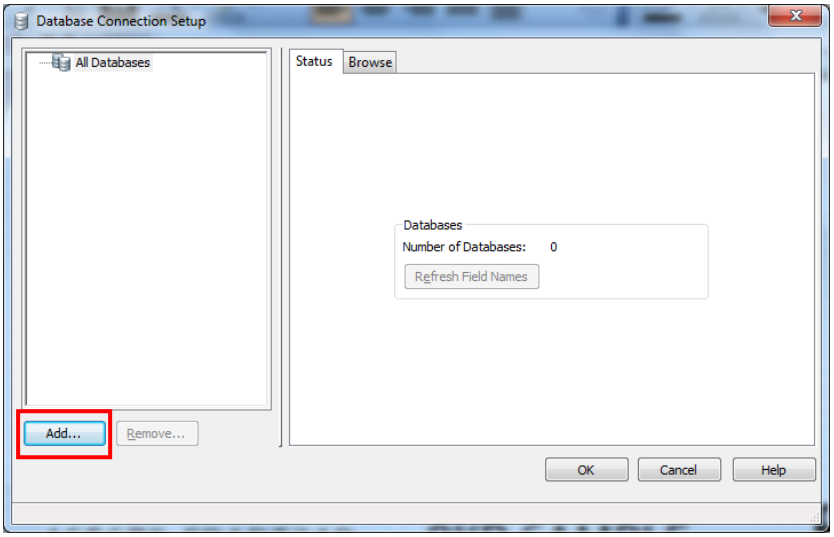
!Caution	・	Recommended character font and size are as follows. Font type: Courier New Font size: 7 pt or more in the Bold type
	・	Please do not use the area within 2mm of edges for the layout because it is not the print area.



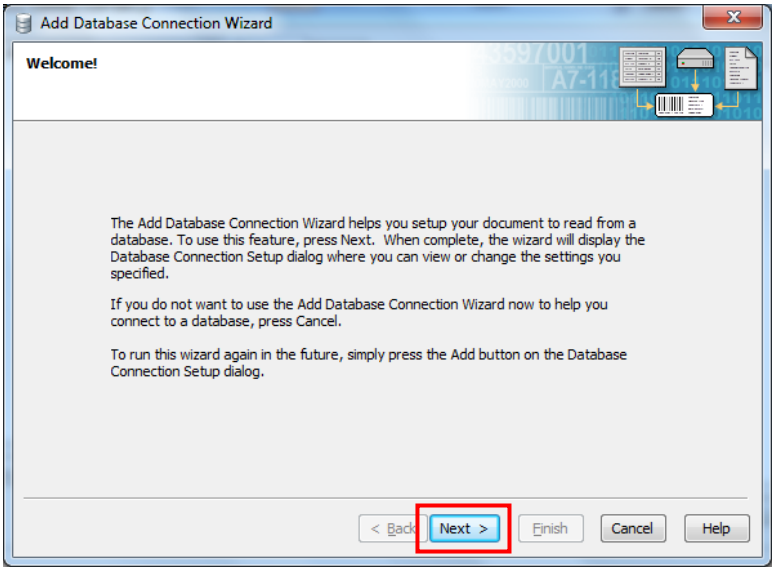
2. Click the **Database Connection Setup**.



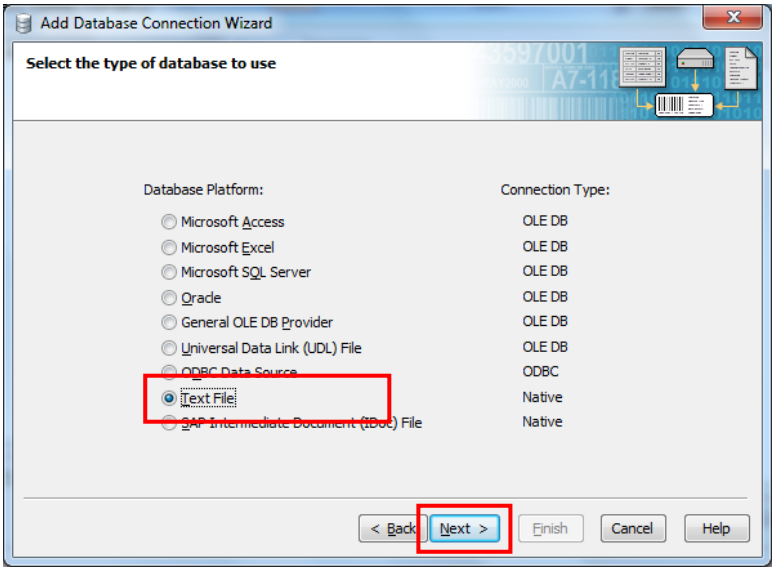
3. **Database Connection Setup** is displayed. Click the **Add...**.



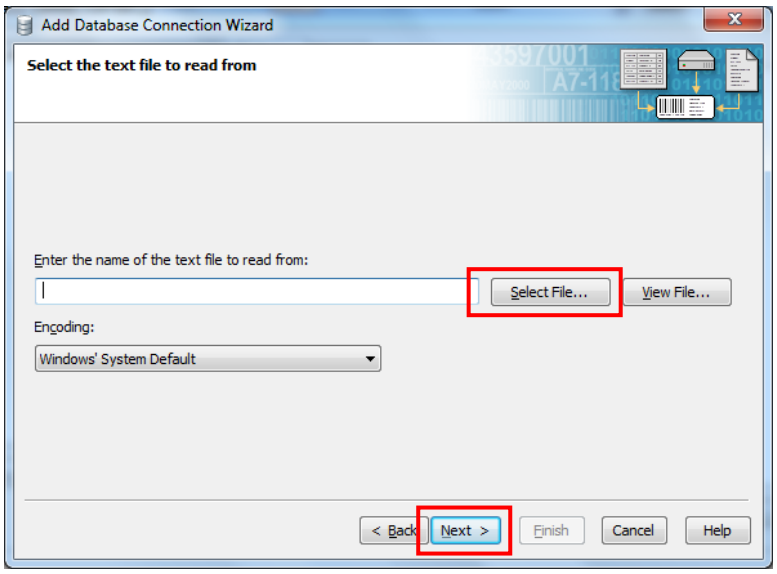
4. Wizard screen is displayed. Click the **Next**.



5. Select the **Text File** and click the **Next**.

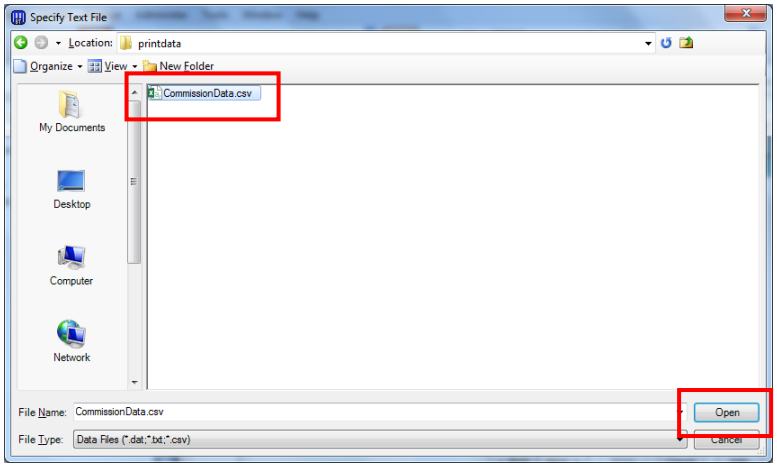


6. Click the **Select File...**.

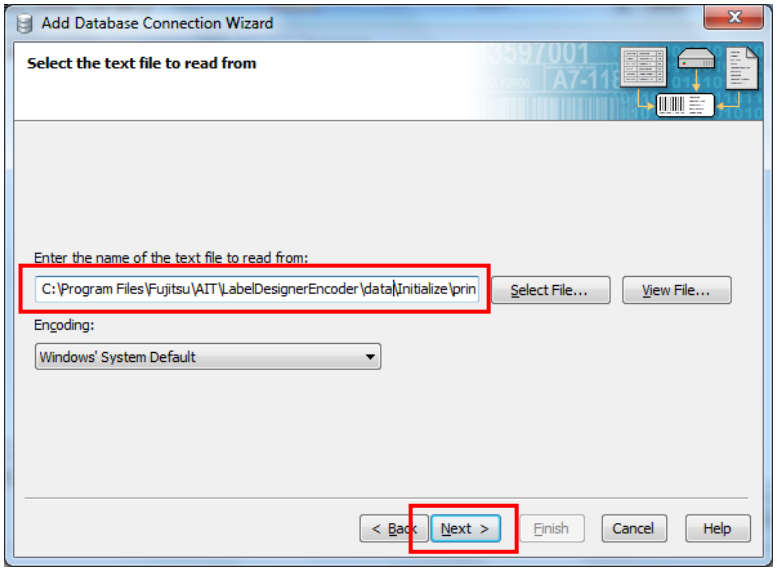


7. Select the **CommissionData.csv** and click the **Open**.

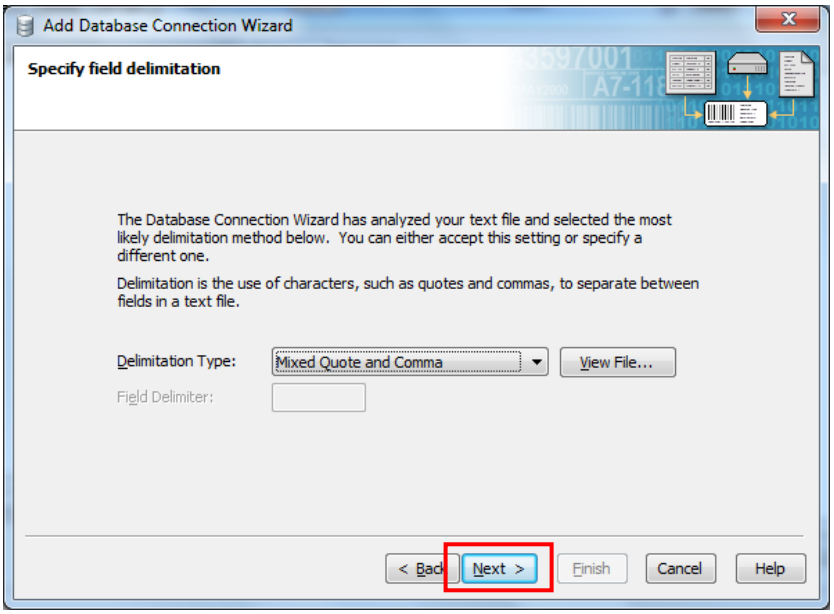
   Refer to ***1.1.4 Overview*** about the folder that stores CommissionData.csv.



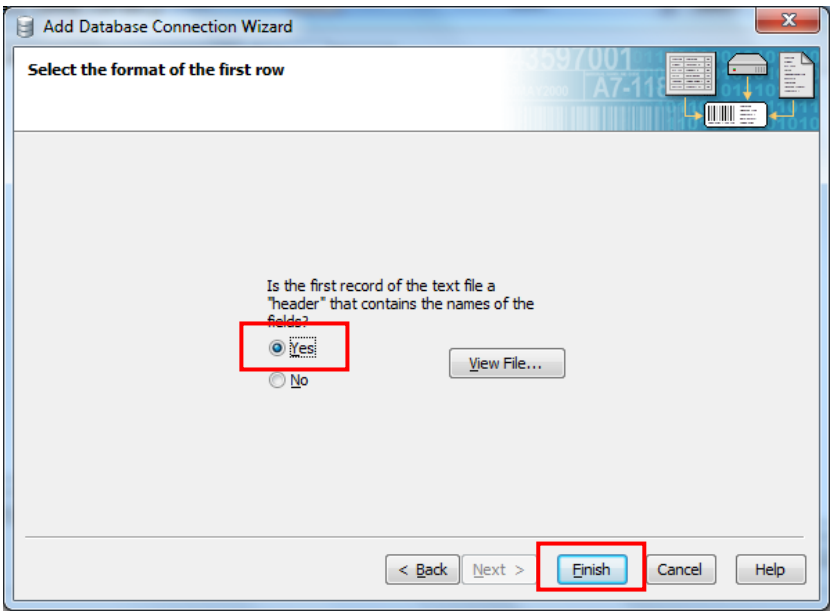
8. Confirm the file name and click the **Next**.



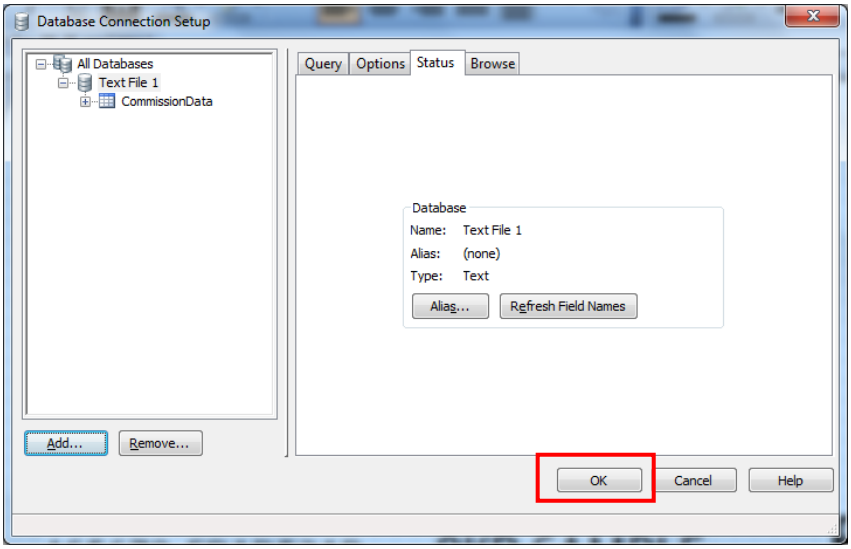
9. Click the **Next**.



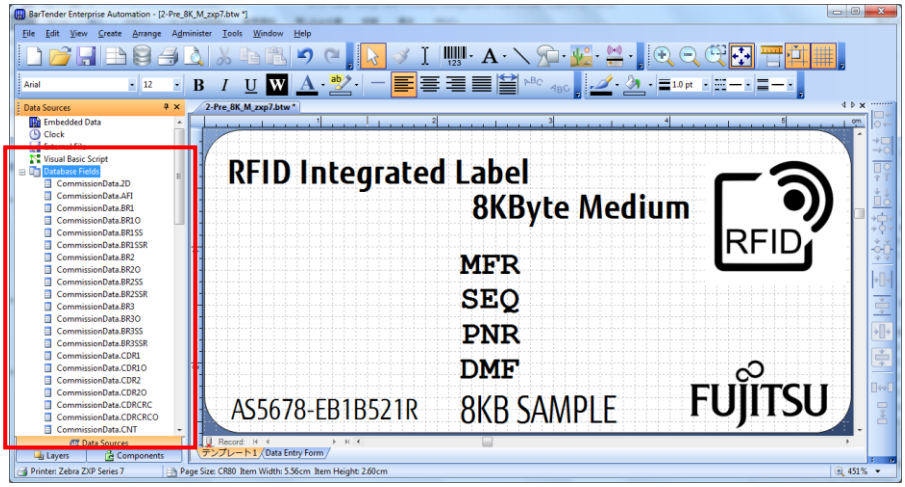
10. Select the **Yes** and click the **Finish**.



11. Click the **OK**.

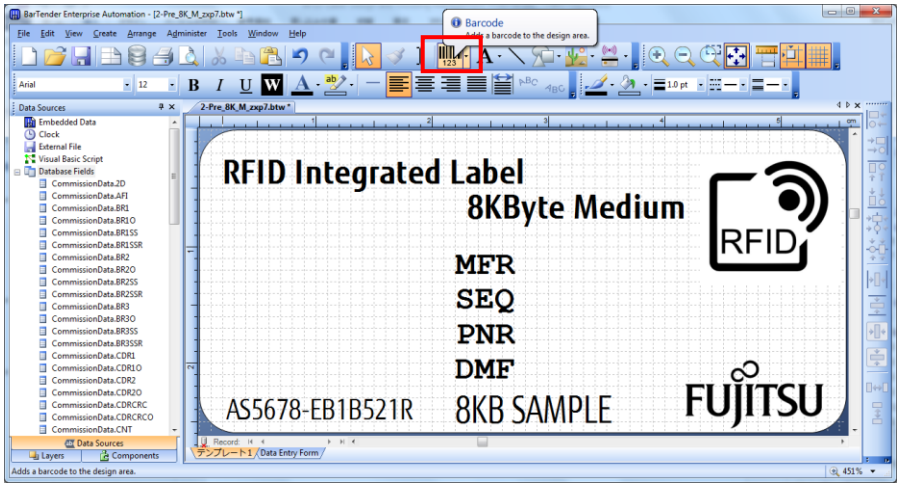


12. Confirm the data base was added.

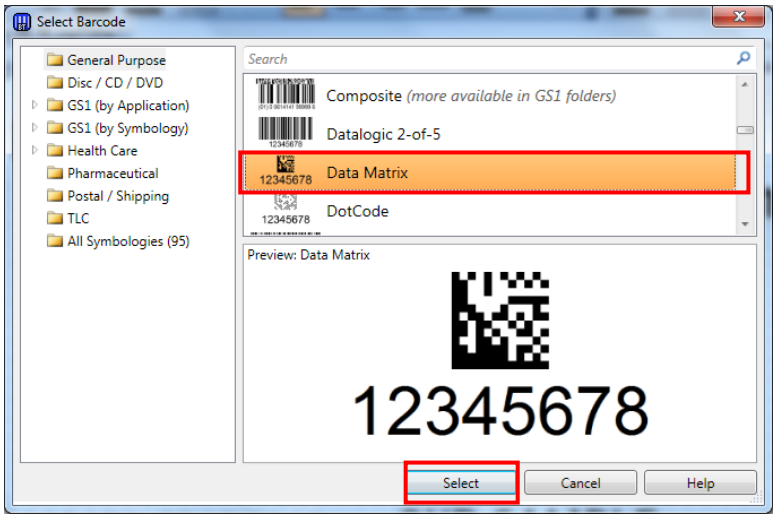


1.3.3 Create 2D Layout

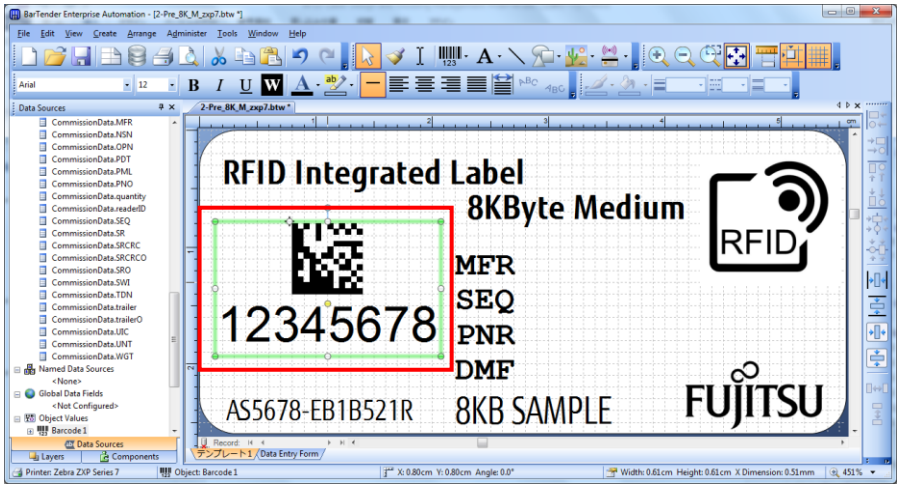
1. Design layout of 2D Barcode. Click the **Barcode**.



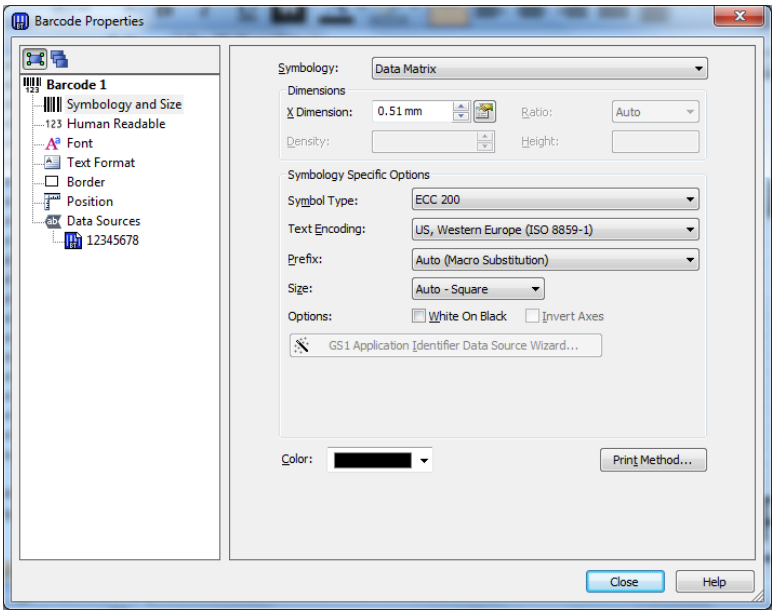
2. Select the **DataMatrix** and click the **Select**.



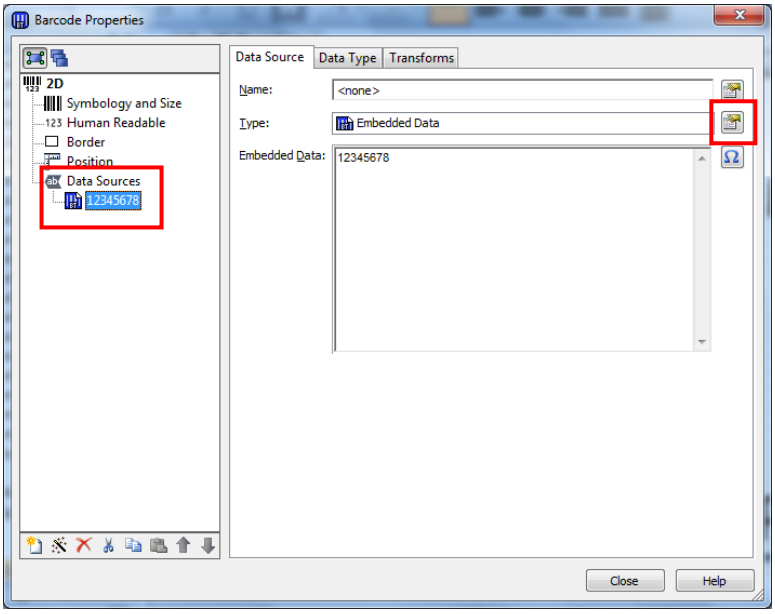
3. Put 2D barcode on wherever you like.



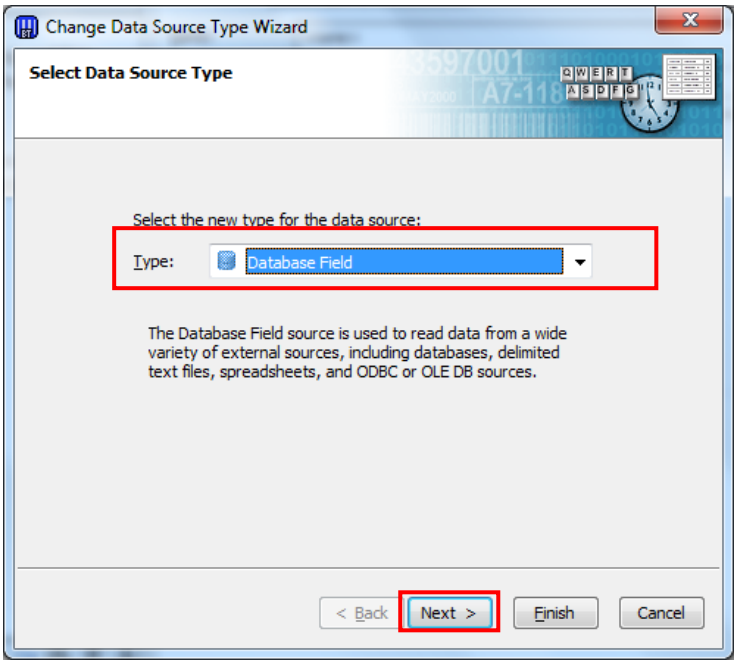
4. Select 2D barcode by right-click and click the **Properties**. **Barcode Properties** is displayed.



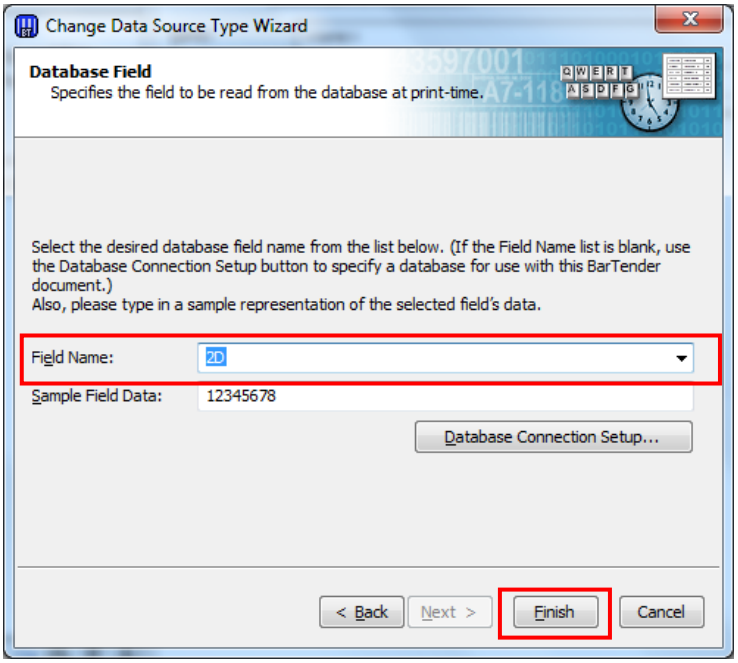
5. Set the data base. Click the value(e.g. 12345678) below **Data Sources** and click the **Type** button.



6. Wizard screen is displayed. Select the **Database Field** from Type and click the **Next**.



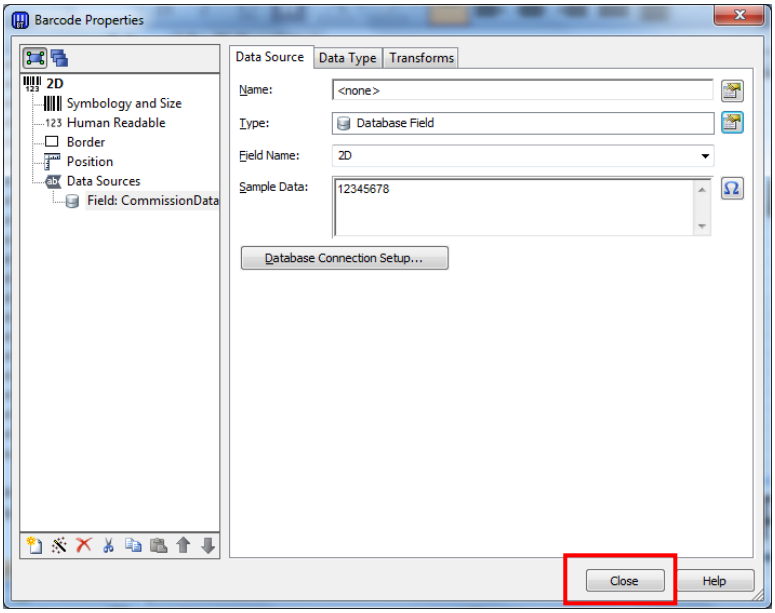
7. Select the **2D** from Field Name and click the **Finish**.



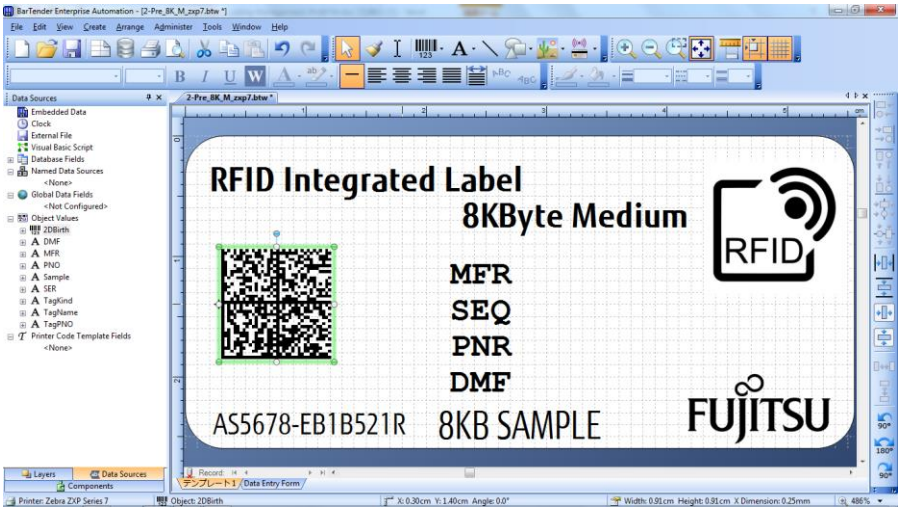
!Caution

- In the case of setting larger data for 2D barcode, the dimension of 2D barcode may become larger and not be properly scanned due to overriding other printing areas.

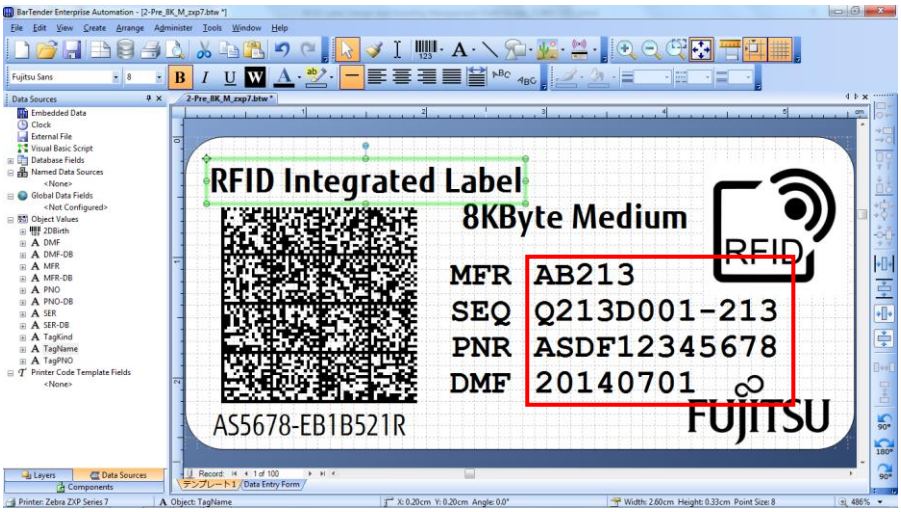
8. Click the **Close**.



9. 2D barcode will be shown and adjust the size.



10. Set the **MFR/SEQ/PNR(PNO)/DMF** according to a similar procedure as **2D**.

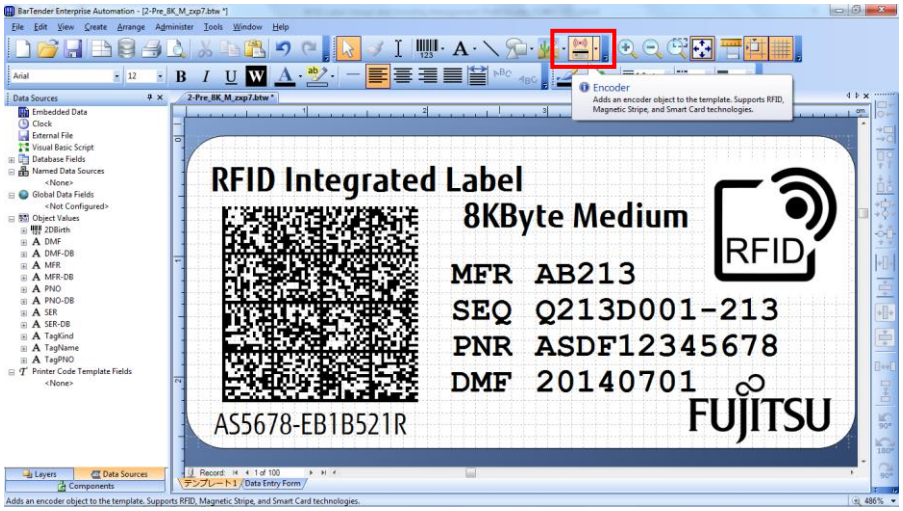


1.3.4 Definition of Tag Data

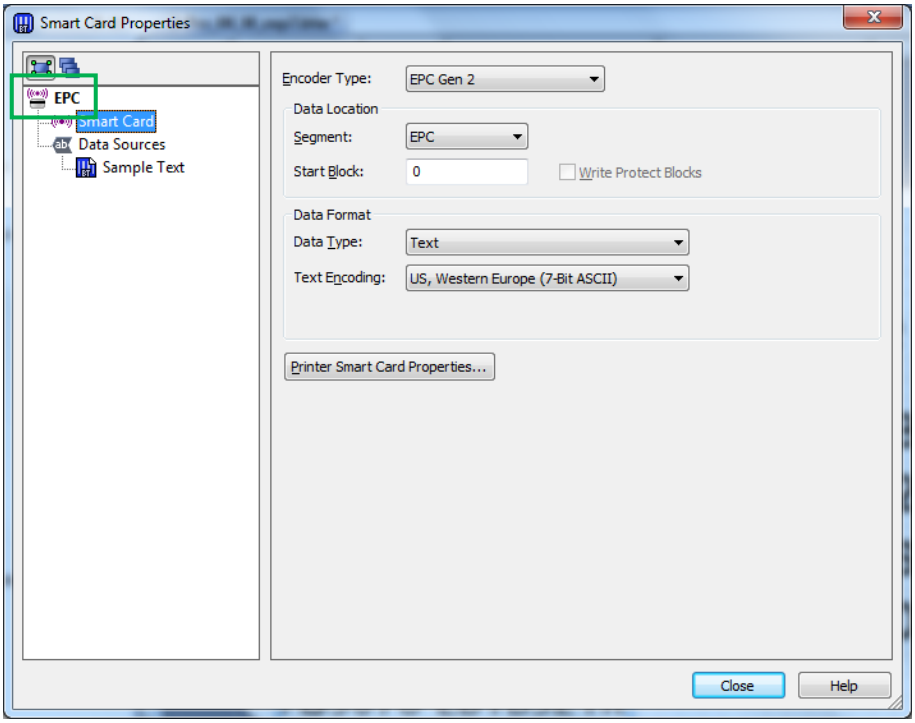
1. Define the data written in Tag.

   Set tag EPC information based on CommissionData.csv.

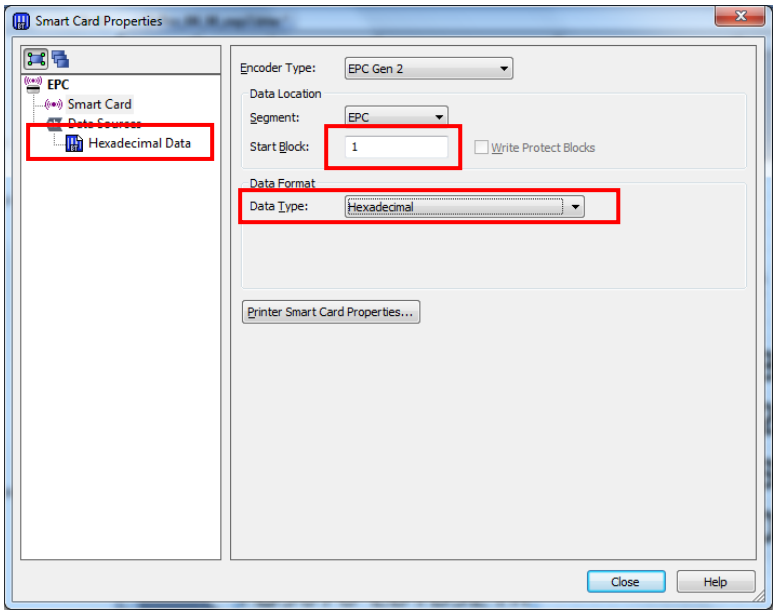
   Click the **Encoder** and select the **EPC Gen2**.



2. The **Smart Card Properties** is displayed. EPC (Object Name) can edit an arbitrary name.

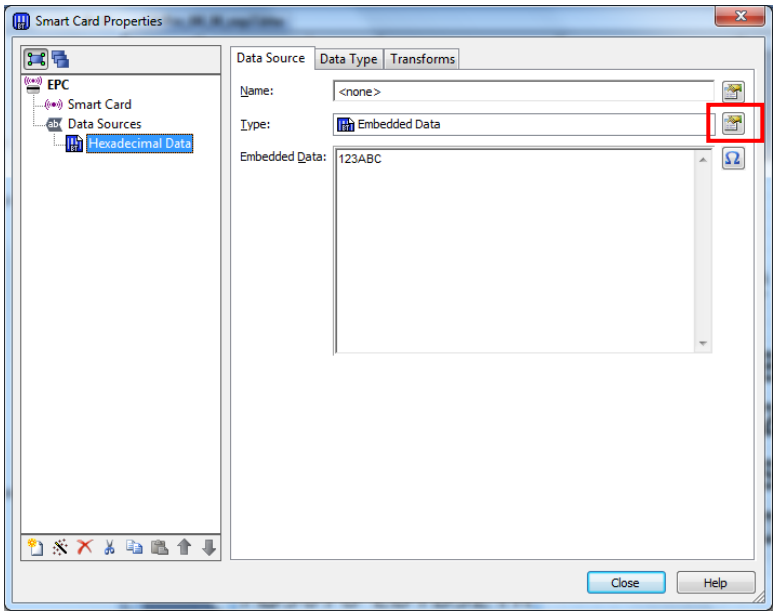


3. Set Start Block to **1** and select the **Hexadecimal** from Data Type.

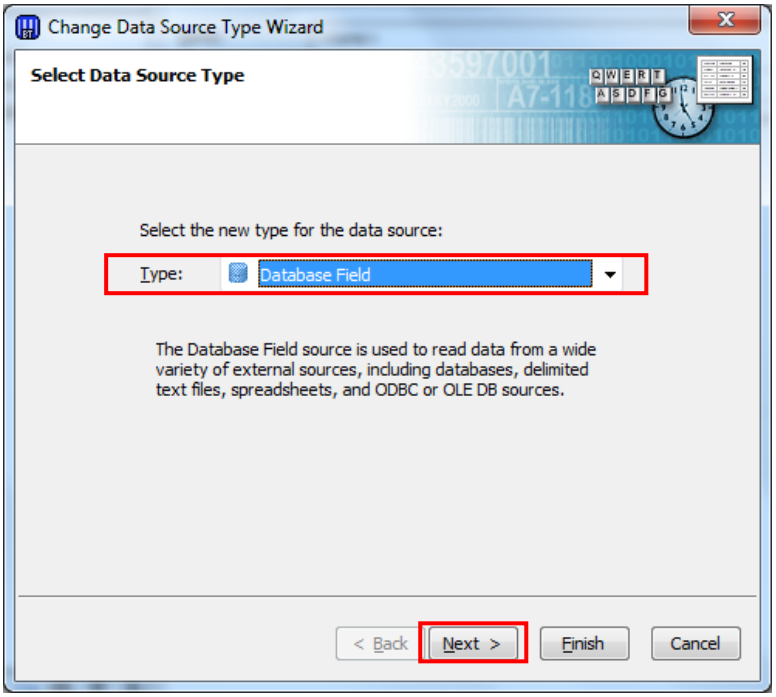


!Caution When Data Type is changed, the warning message is displayed. But click the **Continue**.

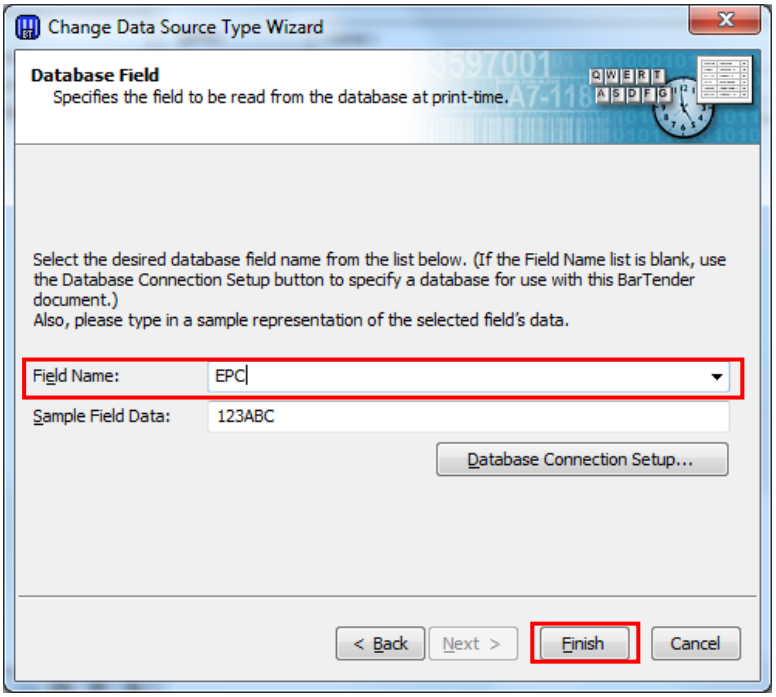
4. Select the **Hexadecimal Data** and click the **Type** button.



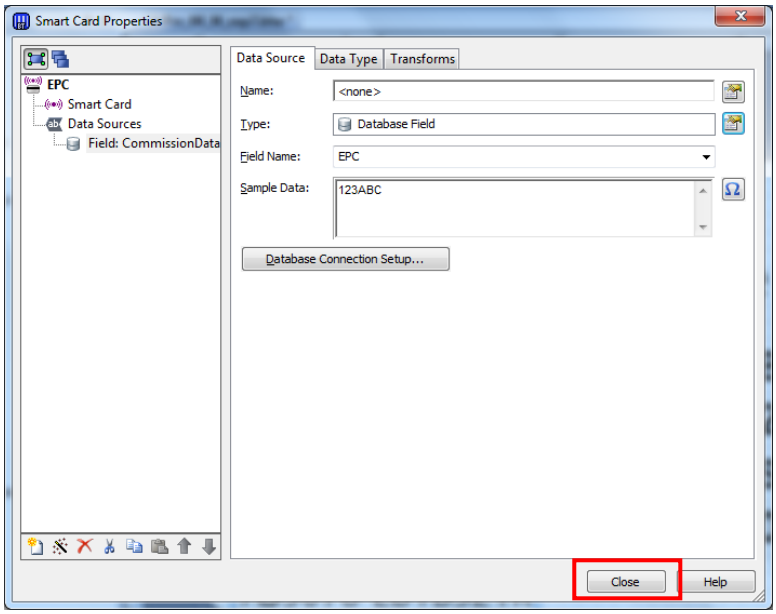
5. Wizard screen is displayed. Select the **Database Field** from Type and click the **Next**.



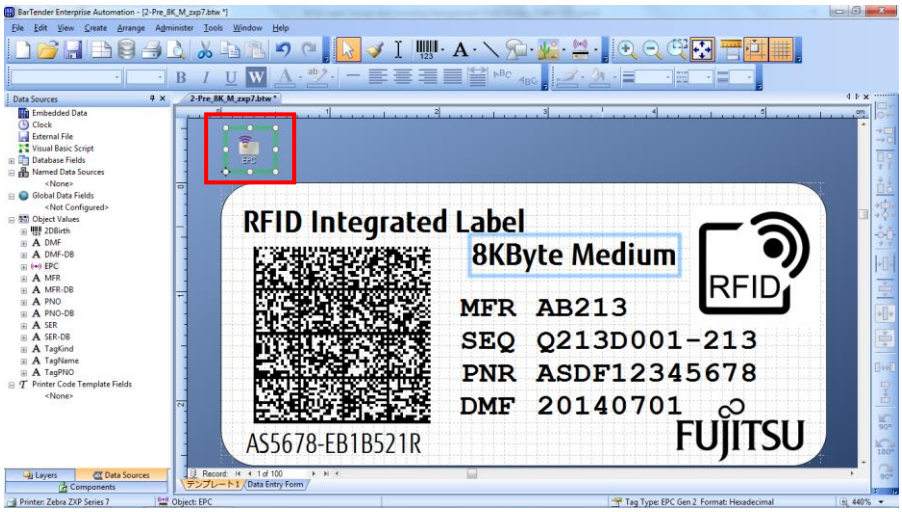
6. Select the **EPC** from Field Name and click the **Finish**.



7. Click the **Close**.

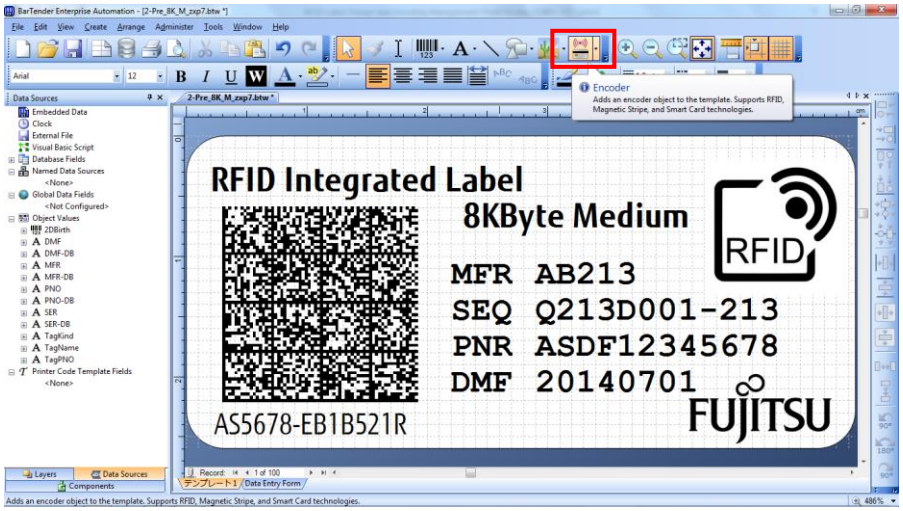


8. Finished.

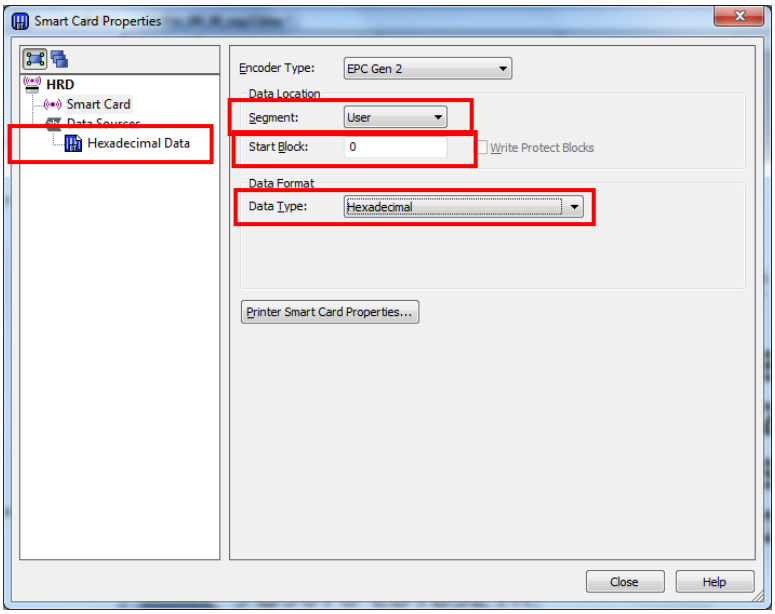


1.3.5 Definition of User Data

1. Define all User area information on CommissionData.csv. Click the **Encoder** and select the **EPC Gen2**. Next, set the **HRD**.

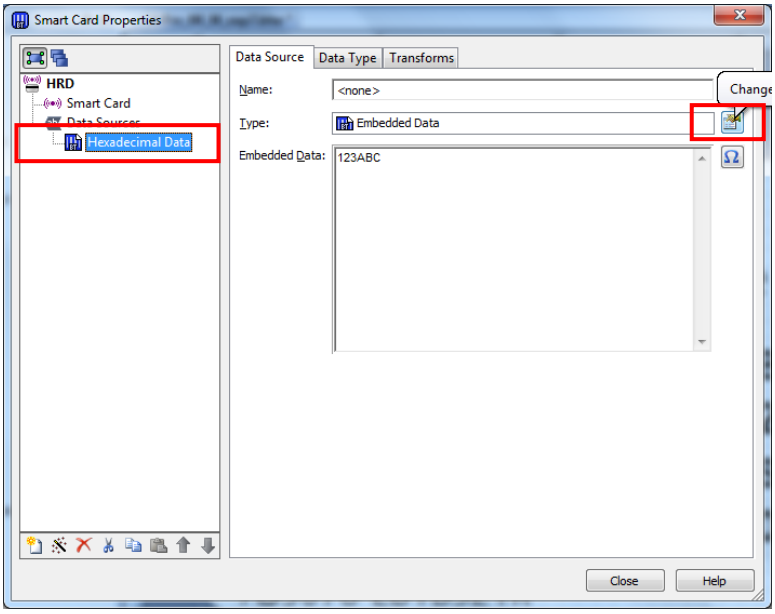


2. Select the **User** from Segment and Set the **Start Block** to the value of **HRDO** of CommissionData.csv. Select the **Hexadecimal** from Data Type.

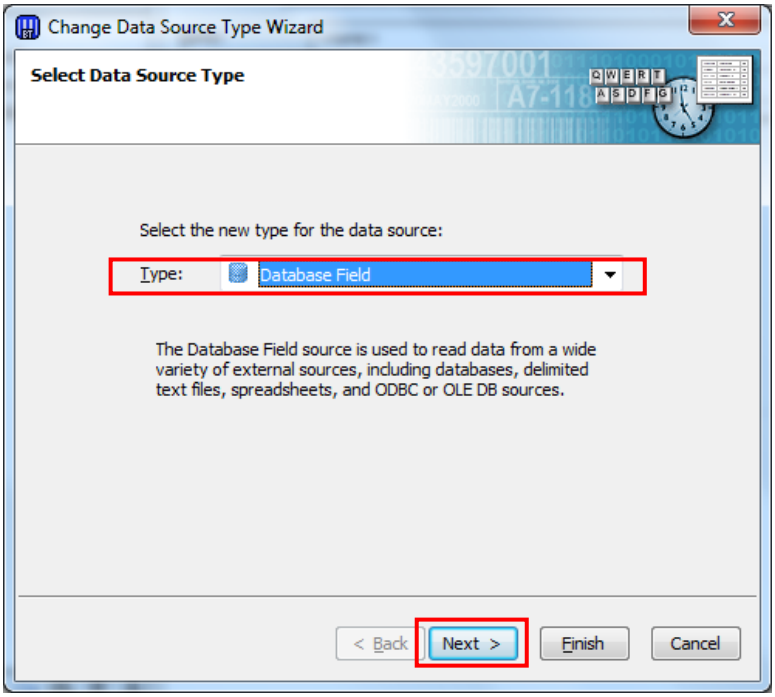


!Caution ・Confirm the **Write Protect blocks** based on Description of CommissionData.csv.

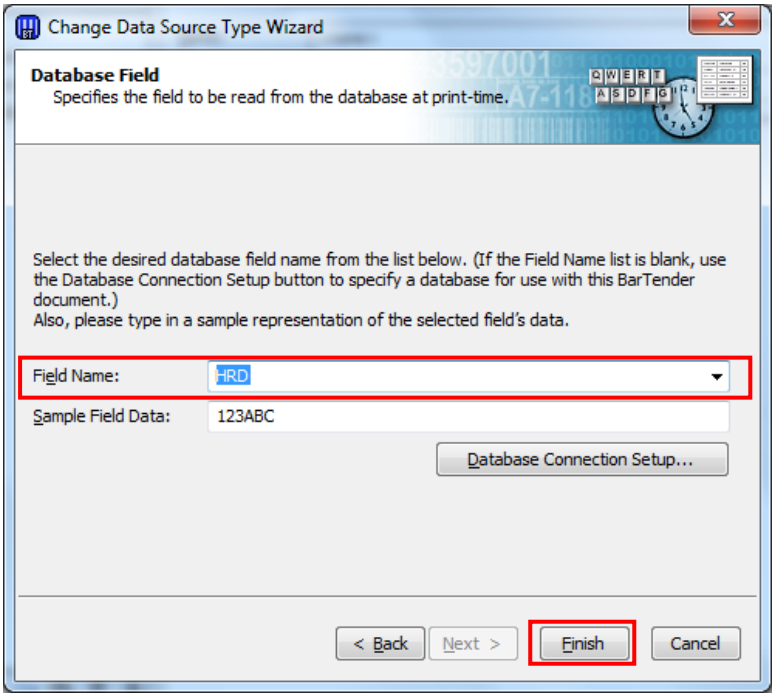
3. Select the **Hexadecimal Data** and click the **Type** button.



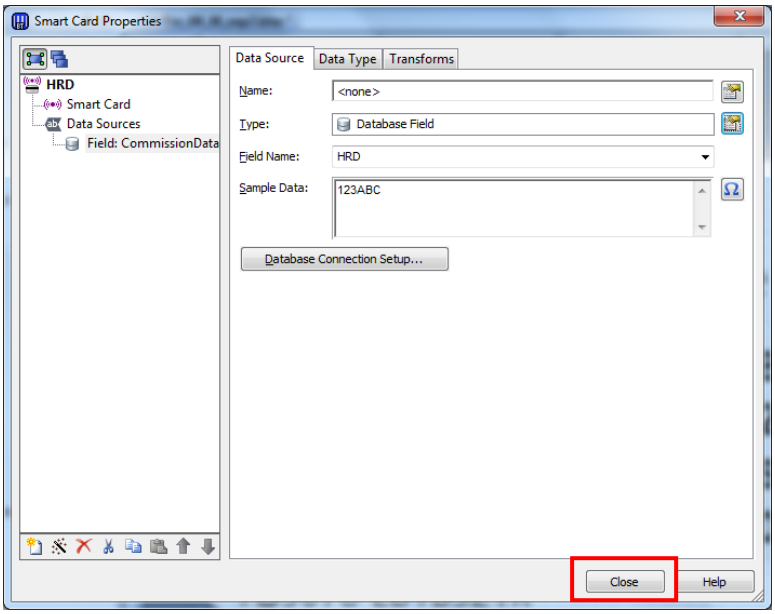
4. Select the **Database Field** from Type and click the **Next**.



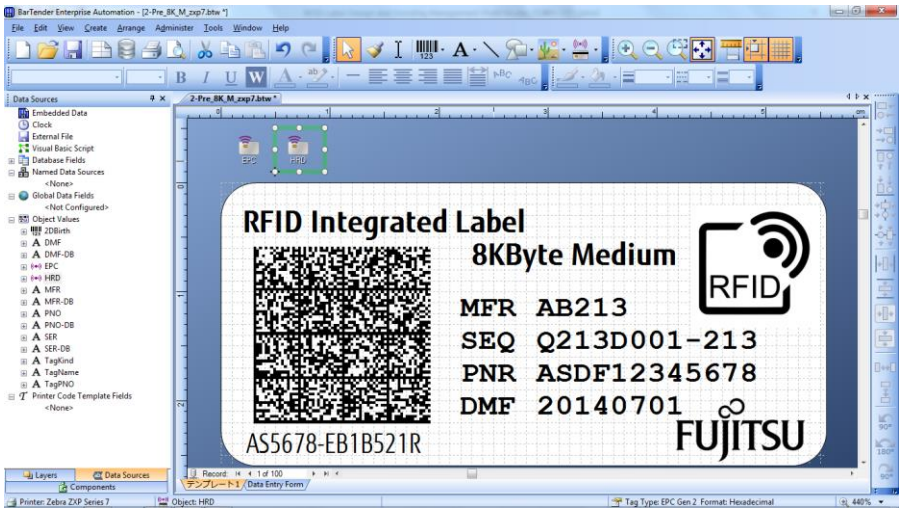
5. Select the **HRD** from Field Name and click the **Finish**.



6. Click the **Close**.

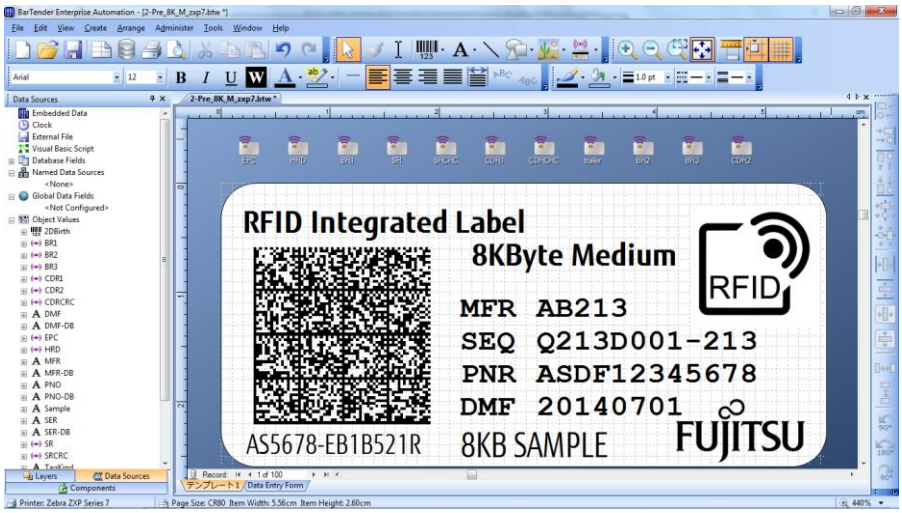


7. Finished.



♦Reference

- Set **BR1,BR2...,SR,SRCRC,CDR1,CDR2…,CDRCRC,Trailer** according to the same procedure as **HRD**.



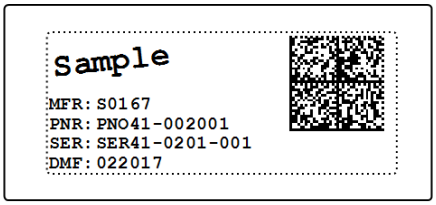
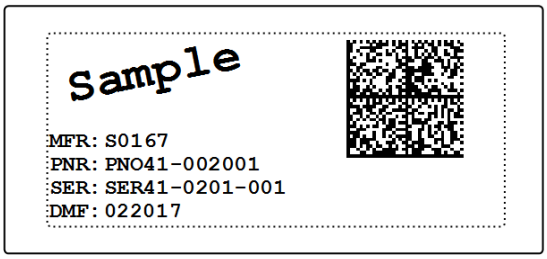
The setting of the BTW file is completed.

!Caution

- Set it for **Dual Record** according to the same procedure as **Multi Record**.
- Starting position (Offset) of Birth Record might be changed into the BTW file according to the input data length of TEIs. It is necessary to correct the BTW file when there is a change in the data length.

1.3.6 Samples of Label Layouts

Below table shows the samples of label layouts.

Label size	Design samples	Parameters
M		1)Font type：Courier New 2)Font size：7pt、Bold 3)Print data a.Data sources MFR/PNR/SER/DMF are extracted from the sample database. (DMF: “MMYYYY” format) b.2D barcode (DataMatrix) c.The other fields are set as fixed strings.
L		1)Font type：Courier New 2)Font size：8pt、Bold 3)Print data a.Data sources MFR/PNR/SER/DMF are extracted from the sample database. (DMF: “MMYYYY” format) b.2D barcode (DataMatrix) c.The other fields are set as fixed strings.
S		1)Font type：Courier New 2)Font size：7pt、Bold 3)Print data a.Data sources MFR/PNR/SER/ are extracted from the sample database. b.2D barcode (DataMatrix) c.The other fields are set as fixed strings.

!Caution

・In the case of setting larger data, the field may go beyond the print area.

・In the case of setting larger data for 2D barcode, the dimension of 2D barcode may become larger and not be properly scanned due to overriding other printing areas.

・In the sample BTW file, the data in 2D barcode is modified from the original payload value as below.

- “PNO” to “PNR”
- Delimiter: “*” to “/”
- Date format: YYYYMMDD to MMYYYY

1.4 Printer Settings

This section explains how to configure and save printer settings in BTW file.

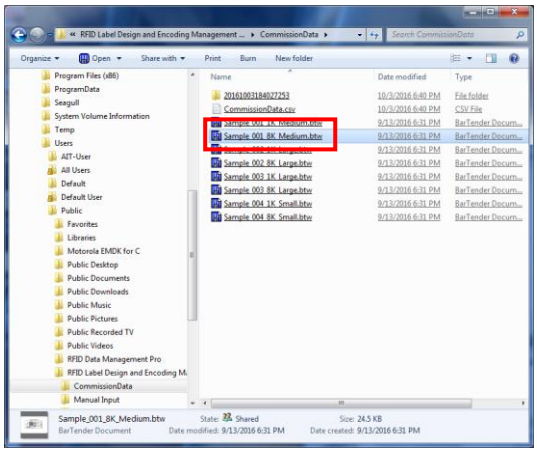
1.4.1 Preparation

The CommissionData.csv generated for the BTW file by the Fujitsu RFID Label Design and Encoding Management Pro is necessary for this operation.

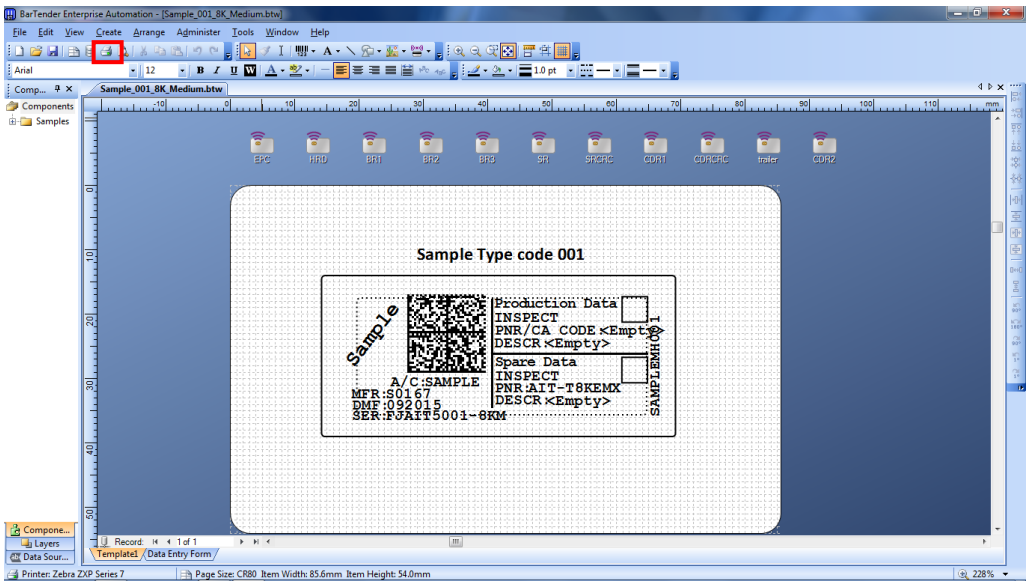
1.4.2 Printer Selection

Procedure to select a printer (ZXP-7) that issues tag is as below.

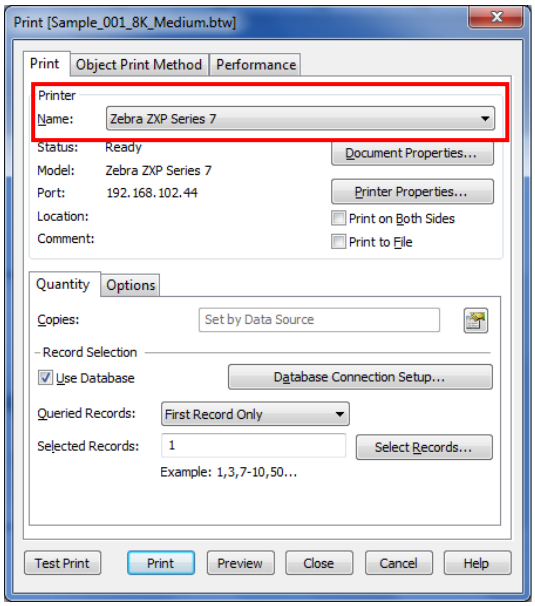
(1) Open the BTW file.



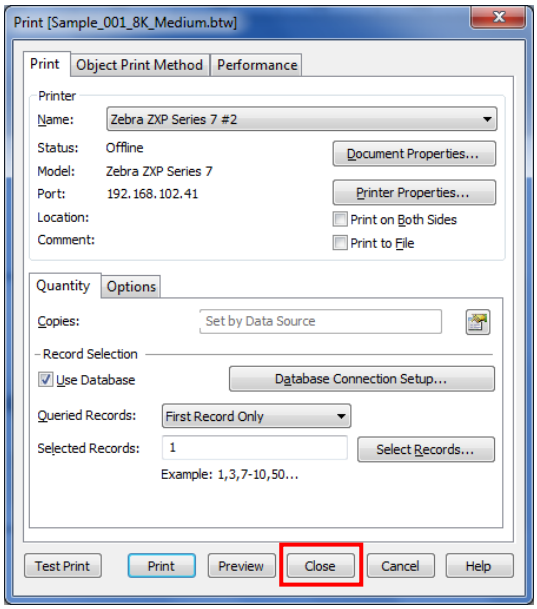
(2) Click the **Print** icon.



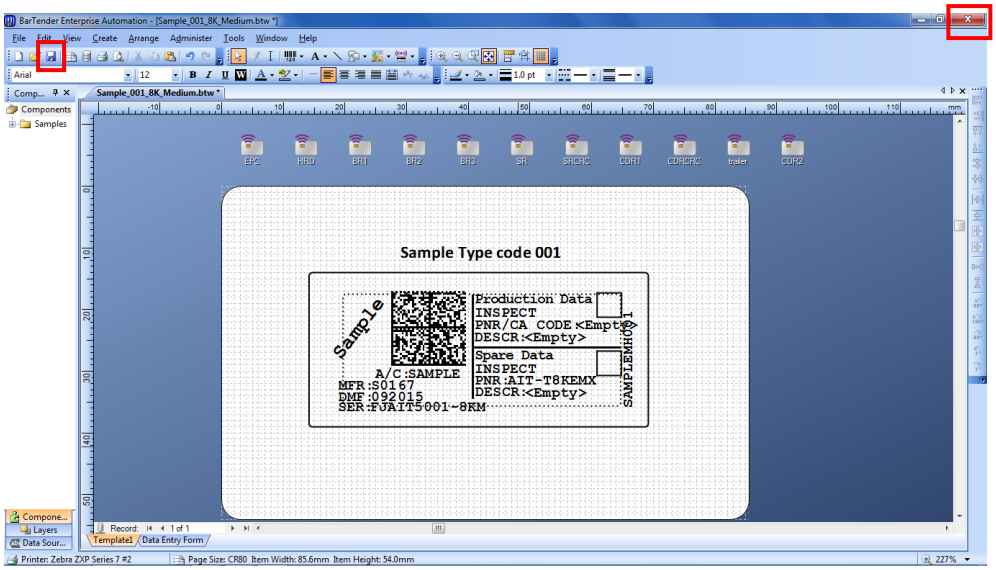
(3) The printer dialog is opened. Select a printer from the **Name** list.



(4) Click the **Close** button.



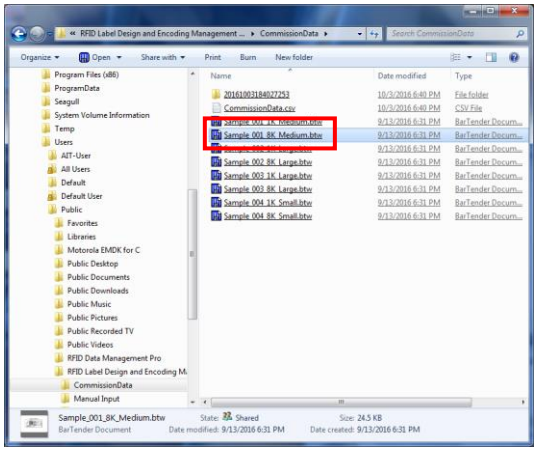
(5) Click the **Save** icon to save the settings. Click the “x” button to close the BTW file.



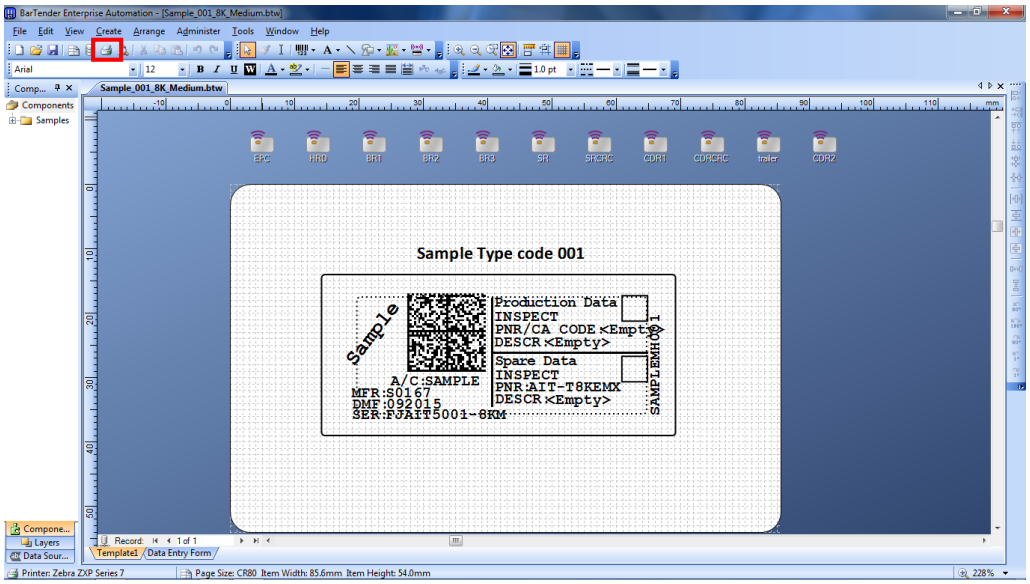
1.4.3 Card Source Setting

Procedure to modify the card source setting is as below.

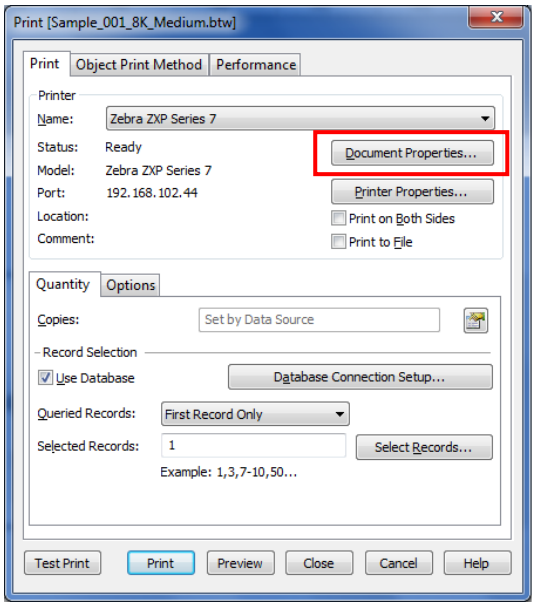
(1) Open the BTW file.



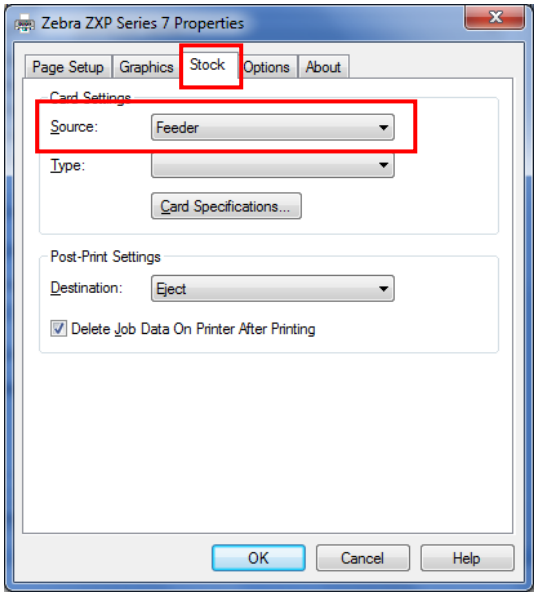
(2) Click the **Print** icon.



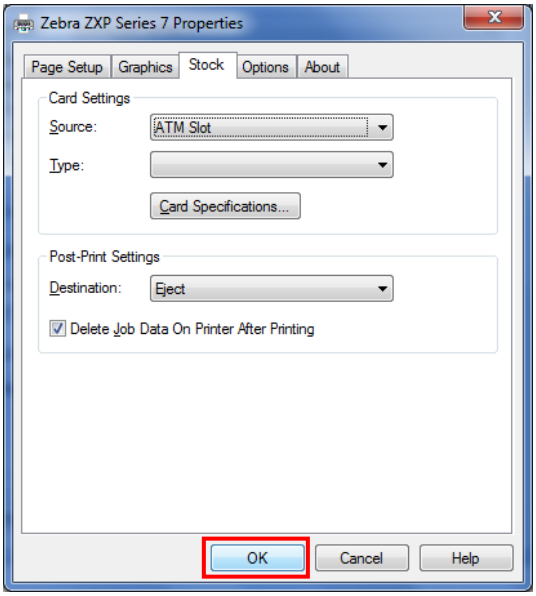
(3) The printer dialog is opened. Click the **Document Properties…** button.



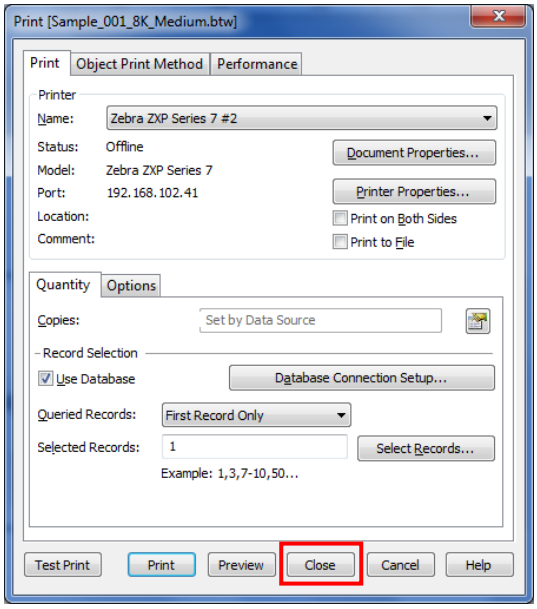
(4) Click the **Stock** tab and select the card source setting.



(5) Click the **OK** button.



(6) Click the **Close** button.



(7) Click the **Save** icon to save the settings. Click the “x” button to close the BTW file.