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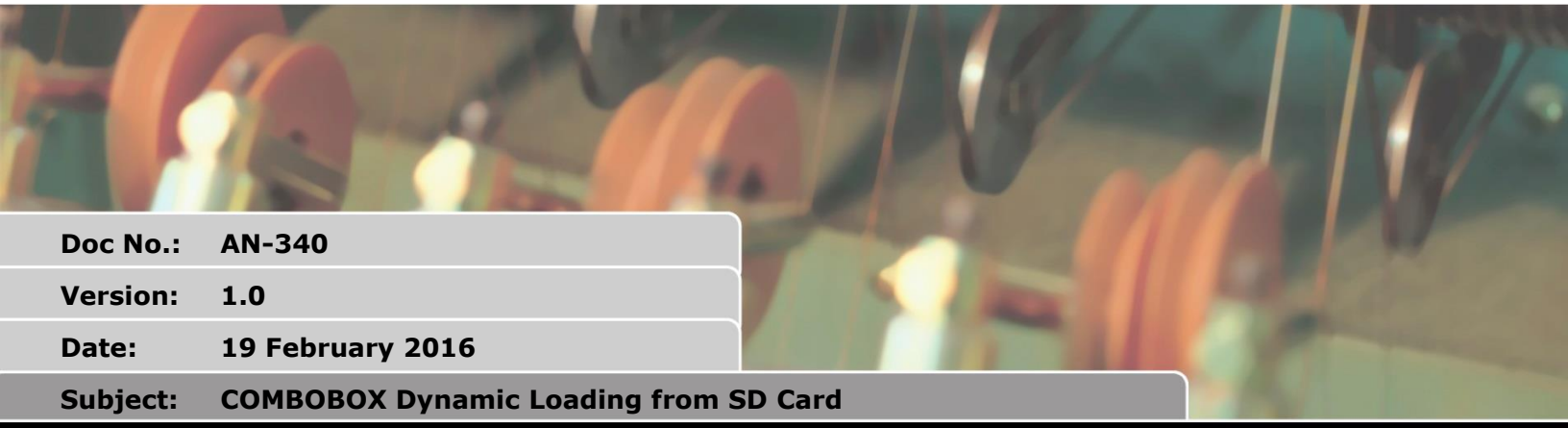

Doc No.: AN-340

Version: 1.0

Date: 19 February 2016

Subject: COMBOBOX Dynamic Loading from SD Card

APPLICATION NOTE

1. Summary

This application note contains a trioBASIC program that is able to read a list of Items from a text file stored in an SD Card and load those Items onto a Trio Uniplay COMBOBOX. The application also can add Items to the text file stored in the SD Card and remove all the Items from it.

2. Clarifications

Besides the trioBASIC code you will see below, it is also necessary to create a HMI page to write/read the items to/from the SD card. The complete Motion Perfect project with the HMI page design as well as the trioBASIC code will be attached to this application note.

For the example to work properly, the user must RUN the trioBASIC program and also use either the HMI simulator included in Motion Perfect or a real Trio Uniplay HMI.

As you will notice, the trioBASIC program keeps running all the time. Otherwise the “String” variables storing the values of the Items would be destroyed. This variables are dynamically bonded to the Uniplay controls (TextBox, ComboBox, etc).

3. TrioBASIC program

```
DIM string_output AS STRING(200)
DIM string_input AS STRING(20)
DIM save_item AS INTEGER
DIM get_items AS INTEGER
DIM temp_file AS INTEGER
DIM data_file AS INTEGER
DIM cr_counter AS INTEGER
DIM clear_sd AS INTEGER

clear_sd = 102
save_item=100
get_items=101
temp_file=40
data_file=41

VR(save_item)=0
VR(get_items)=0
```

```
VR(remove_sd)=0

'load combobox from SD CARD
GOSUB read

WHILE TRUE
    IF (VR(save_item) = 1) THEN
        VR(save_item) = 0
        GOSUB write
    ELSEIF (VR(get_items) = 1) THEN
        VR(get_items) = 0
        GOSUB read
    ELSEIF (VR(clear_sd) = 1) THEN
        VR(clear_sd) = 0
        GOSUB clearsd
    ENDIF
WEND

STOP

'Write to SD card
write:
cr_counter = 0
GOSUB openread_datafile
GOSUB openwrite_tempfile

WHILE KEY #data_file
    GET #data_file, char
    PRINT #temp_file, CHR(char);
    'PRINT CHR(char);
    IF char = 13 OR char = 10 THEN
        cr_counter = cr_counter + 1
    ENDIF
WEND

IF string_input <> "" THEN
    PRINT #temp_file, cr_counter;".";string_input + CHR(10);
ENDIF

GOSUB openwrite_datafile
GOSUB openread_tempfile

WHILE KEY #temp_file
    GET #temp_file, char
    PRINT #data_file, CHR(char);
    'PRINT CHR(char);
WEND

RETURN

'Read from SD Card
read:
GOSUB openread_datafile
IF KEY #data_file THEN
    WHILE KEY #data_file
        IF KEY #data_file THEN
            CHANNEL_READ(data_file, string_output)
        ENDIF
    WEND
```

```
ELSE
    string_output=""
ENDIF

IF MID(string_output,0,2)=CHR(13)+CHR(10) THEN
    string_output = MID(string_output,2,LEN(string_output) - 2)
ELSEIF MID(string_output,0,1)= CHR(10) THEN
    string_output = MID(string_output,1,LEN(string_output) - 1)
ELSEIF MID(string_output,0,1)=CHR(13) THEN
    string_output = MID(string_output,1,LEN(string_output) - 1)
ENDIF

RETURN

openread_tempfile:
GOSUB close_temp_file
OPEN #temp_file AS "DATATEMP" FOR INPUT
WA(10)
RETURN

openwrite_tempfile:
GOSUB close_temp_file
OPEN #temp_file AS "DATATEMP" FOR OUTPUT(1)
WA(10)
RETURN

openread_datafile:
GOSUB close_data_file
OPEN #data_file AS "SD:DATA.txt" FOR INPUT
WA(10)
RETURN

openwrite_datafile:
GOSUB close_data_file
OPEN #data_file AS "SD:DATA.txt" FOR OUTPUT(0)
WA(10)
RETURN

close_temp_file:
CLOSE #temp_file
WA(10)
RETURN

close_data_file:
CLOSE #data_file
WA(10)
RETURN

clearsd:
GOSUB openwrite_datafile
PRINT #data_file, "";
RETURN
```