

# Nasdaq Calypso

Classification of Financial Instruments (CFI Code)

Version 17

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#### **Document History**

Revision	Published	Summary of Changes
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This document provides details on the generation of a CFI code.



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# Introduction

The classification of financial instruments (CFI Code) was developed for cross border classification and grouping of financial instruments. It is a six-character code which provides a standardized method for grouping and identifying financial instruments.

The first character is the highest level of classification of financial instruments. The following categories are supported:

• Swaps (S)

This category includes agreements or contracts where two counterparties agree to exchange periodic streams of cash flows with each other.

Non-listed and complex listed options (H)

This category includes over the counter (OTC) or unlisted options.

Forwards (J)

This category includes contracts, which are not exchange traded or listed, entered between two parties to buy, or sell the underlying asset at a specified future date at the price specified at the outset of the contract.

By default, the CFI code is not set by the system.

In this case, you can import CFI codes using the Anna DSB interface.

Please refer to the Calypso Anna DSB Integration Guide for details.

Otherwise, you can set Value = true in domain "CalculateCFI" and the system automatically sets the CFI code upon trade entry in product code CFI based on the following logic.



# **Product Classification**

The table below provides supported product types and related CFI category.

#### 2.1 Interest Rate Derivatives

Product Type	Category
Vanilla swap (fixed/fixed, fixed/float, float/float)	S-R-*-*-*-
Vanilla basis swap	S-R-*-*-*-
OIS swap	S-R-*-*-*-
Inflation swap	S-R-*-*-*-
Swap (extended type Cancellable)	S-R-*-*-*-
ExtendibleSwap	S-R-*-*-*-
Swaption	H-R-*-X-*-*-
XCCYSwap: Fix/Float, Fix/Fix, Basis Swap (Float/Float)	S-R-*-*-*-
XCCYSwap (extended type Cancellable)	S-R-*-*-*-
SwapNonDeliverable	S-R-*-*-*-
CapFloor	H-R-*-X-*-*-
CappedSwap	H-R-*-X-*-*-
SpreadCapFloor	H-R-*-X-*-*-
Inflation CapFloor	H-R-*-X-*-
FRA	J-R-*-X-*-*-

#### 2.2 Credit Derivatives

Product Type	Category
CreditDefaultSwap	S-C-*-*-*-
CDS Index	S-C-*-*-*-
CDS Index Option	H-C-*-*-*-
CDS Index Tranche	S-C-*-*-*-
CDSNthLoss	S-C-*-*-*-
CDSNthDefault	S-C-*-*-*-
Risk Participation Swap (in ContingentCDS window)	S-C-*-*-*-



Product Type	Category
TRS on Bond, Bonds Basket, and Market Index (in PerformanceSwap window)	S-C-*-*-*-

# 2.3 Foreign Exchange

Product Type	Category
FX Forward	J-F-*-X-*-*-
FXNDF	J-F-*-X-*-*-
FXSwap	S-F-*-X-X-*-
FXNDFSwap	S-F-*-X-X-*-
FXOption	H-F-*-*-*-
FXNDO (non-deliverable option)	H-F-*-*-*-

# 2.4 Equity Derivatives

Product Type	Category
Equity Structured Option	H-E-*-X-*-*-
Equity Linked Swap	S-E-*-*-X-*-
Equity Forward	J-E-*-X-*-*-
Variance Swap	S-E-*-*-X-*-
Dividend Swap	S-E-*-*-X-*-

# 2.5 Commodity Derivatives

Product Type	Category
CommoditySwap	S-T-*-*-X-*-
CommodityOTCOption	H-T-*-*-*-



# Category: Swaps - S-\*-\*-\*-\*-

Swaps are broken down into the following groups.

- R Rates
- T Commodities
- **E** Equity
- C Credit
- F Foreign exchange
- **M** Others (miscellaneous)

#### 3.1 Rates - S-R-\*-\*-\*-

#### 3.1.1 Category & Group

The first two characters are 'SR'. The applicable products are seen in the section product classification.

#### 3.1.2 First attribute

The first attribute (3<sup>rd</sup> character) in rates provides details of the underlying assets.

Character	Field Name	Description
Α	Basis swap	Both legs in the transaction are float
С	Fixed-Floating	1 leg fix / 1 leg float*  *Floating leg is not inflation or OIS or Zero Coupon
D	Fixed-Fixed	Both legs in the transaction are fixed
G	Inflation rate index	1 leg is an inflation rate. Rate index name type is set as inflation
Н	Overnight Index Swap (OIS)	1 leg fix / 1 leg float. Rate Index Name contains "-OIS"
Z	Zero coupon	1 leg is an inflation rate Rate index name type is set as inflation & payment period is ZC
М	Others (Miscellaneous)	Applied if 1 leg is not fix/float.  For example, in SpreadSwap when 1 leg is a spread



#### 3.1.3 Second attribute

The second attribute (4<sup>th</sup> character) in rates provides details of the notional stream.

Character	Field Name	Description
С	Constant	Notional Amortization = Bullet
D	Accreting	Notional Amortization = Accreting or notional amount is increasing
1	Amortizing	Notional Amortization = Step down (based on sign as '+' or 'x')
Υ	Custom	Notional Amortization = Custom or Customized is true

#### 3.1.4 Third attribute

The third attribute (5<sup>th</sup> character) in rates provides details of the currencies involved.

Character	Field Name	Description
S	Single-Currency	A single currency is applied in pay/rec fields
С	Cross-Currency	Multiple currencies are applied in pay/rec fields

#### 3.1.5 Fourth attribute

The fourth attribute (6th character) in rates provides details of the delivery method.

Character	Field Name	Description
С	Cash	Populated based on settle type
Р	Physical	Populated based on settle type

## 3.2 Commodities - S-T-\*-\*-X-\*-

#### 3.2.1 Category & Group

The first two characters are 'ST'. The applicable products are seen in the section product classification.

#### 3.2.2 First attribute

The first attribute (3<sup>rd</sup> character) in rates provides details of the underlying assets.



Character	Field Name	Description
J	Energy	Not implemented
K	Metals	Not implemented
А	Agriculture	Not implemented
N	Environmental	Not implemented
G	Freight	Not implemented
Р	Polypropylene products	Not implemented
S	Fertilizer	Not implemented
Т	Paper	Not implemented
1	Index	Not implemented
Q	Multi Commodity	Not implemented
М	Others	Not implemented
X	Unknown	Defaulted to X

#### 3.2.3 Second attribute

The second attribute (4<sup>th</sup> character) in commodities provides details of the method used to determine contract value – return or payout trigger.

Character	Field Name	Description
С	Contract for Difference	Not implemented
Т	Total Return	Defaulted to 'T'

#### 3.2.4 Third attribute

The third attribute (5th character) in commodities is an undefined value which is defaulted to 'X'



#### 3.2.5 Fourth attribute

The fourth attribute (6<sup>th</sup> character) in commodities provides details of the delivery method.

Character	Field Name	Description
С	Cash	Defaulted to 'C'
P	Physical	Not supported
E	Elect at settlement	Not supported



#### 3.3 Equity - S-E-\*-\*-X-\*-

#### 3.3.1 Category & Group

The first two characters are 'SE'. The applicable products are seen in the section product classification.

#### 3.3.2 First attribute

The first attribute (3<sup>rd</sup> character) in rates provides details of the underlying assets.

Character	Field Name	Description
S	Single stock	Applied when underlying is an equity
1	Index	Applied when underlying is an equity index
В	Basket	Applied when underlying is a basket
М	Others	Applied when there is more than 1 underlying of different types. For example, in the case of Equity/Basket

#### 3.3.3 Second attribute

The second attribute (4<sup>th</sup> character) provides details of the method used to determine contract value – return or payout trigger.

Character	Field Name	Description
P	Price	Applied in EquityLinkedSwap when swap type is Price Return
D	Dividend	Applied in EquityLinkedSwap when swap type is Dividend
		Always set as 'D' for DividendSwap and
V	Variance	Applied in VarianceSwap when swap type is set as Variance
L	Volatility	Applied in VarianceSwap when swap type is set as Volatility
Т	Total Return	Applied in EquityLinkedSwap when swap type is TotalReturn
С	Contract for Difference	Not supported
М	Others	Applied in VarianceSwap when swap type is set as Gamma

#### 3.3.4 Third attribute

The third attribute (5th character) is an undefined value which is defaulted to 'X'



#### 3.3.5 Fourth attribute

The fourth attribute (6<sup>th</sup> character) provides details of the delivery method.

Character	Field Name	Description
С	Cash	Populated based on settle type
Р	Physical	Populated based on settle type
E	Elect at settlement	Populated based on settle type

#### 3.4 Credit - S-C-\*-\*-\*-

#### 3.4.1 Category & Group

The first two characters are 'SC'. The applicable products are seen in the section product classification.

#### 3.4.2 First attribute

The first attribute (3<sup>rd</sup> character) provides details of the underlying assets.

Character	Field Name	Description
U	Single Name	Applied to the following:
V	Index Tranche	Applied to the following:
I	Index	Applied to the following:
В	Basket	Applied to the following:
М	Others	Applied to the following:  • ContingentCreditDefaultSwap (Risk Participation Swap)



#### 3.4.3 Second attribute

The second attribute (4<sup>th</sup> character) provides details of the method used to determine contract value – return or payout trigger.

Character	Field Name	Description
С	Credit Default	Applied to the following:
Т	Total Return	Applied to Total Return Swap (Performance Swap)
M	Others	Not supported

#### 3.4.4 Third attribute

The third attribute (5<sup>th</sup> character) provides the underlying issuer type.

Character	Field Name	Description
С	Corporate	Not implemented
S	Sovereign	Not implemented
L	Local	Not implemented
Χ	Unknown	Defaulted value

#### 3.4.5 Fourth attribute

The fourth attribute (6<sup>th</sup> character) provides details of the delivery method.

Character	Field Name	Description
С	Cash	Populated based on settlement type
Р	Physical	Populated based on settlement type
Α	Auction	Populated based on settlement type



#### 3.5 Foreign exchange - S-F-\*-X-X-\*-

#### 3.5.1 Category & Group

The first two characters are 'SF'. The applicable products are seen in the section product classification.

#### 3.5.2 First attribute

The first attribute (3<sup>rd</sup> character) provides details of the underlying assets.

Character	Field Name	Description
A	Spot-Forward Swap	Applied when: Product type=FXSwap and Product Sub Type= Standard Product type=FXNDFSwap
С	Forward-Forward Swap	Not supported
М	Others	Not supported

#### 3.5.3 Second attribute

The second attribute (4th character) is an undefined value which is defaulted to 'X'

#### 3.5.4 Third attribute

The third attribute (5th character) is an undefined value which is defaulted to 'X'

#### 3.5.5 Fourth attribute

The fourth attribute (6th character) provides details of the delivery method.

Character	Field Name	Description
С	Cash	Populated based on settlement type
P	Physical	Populated based on settlement type
N	Non-deliverable	Populated based on settlement type



# Category: Forwards - J-\*-\*-X-\*-\*-

Forwards are broken down into the following groups.

- E Equity
- F Foreign Exchange
- C Credit
- R Rates
- T Commodities

#### 4.1 Equity - J-E-\*-X-\*-\*-

#### 4.1.1 Category & Group

The first two characters are 'JE'. The applicable products are seen in the section product classification.

#### 4.1.2 First attribute

The first attribute (3<sup>rd</sup> character) provides details of the underlying assets.

Character	Field Name	Description
S	Single Stock	Applied if underlying is an equity
I	Index	Applied if underlying is an equity index
В	Basket	Applied if underlying is a basket
0	Options	Not supported
F	Futures	Not supported

#### 4.1.3 Second attribute

The second attribute (4th character) is an undefined value which is defaulted to 'X'

#### 4.1.4 Third attribute

The third attribute (5<sup>th</sup> character) provides details of the method used to determine contract value – return or payout trigger.



Character	Field Name	Description
С	Contract for difference	Not applicable
S	Spreadbet	Not applicable
F	Forward price of underlying instrument	Default value applied to Equity Forward

#### 4.1.5 Fourth attribute

The fourth attribute (6<sup>th</sup> character) provides details of the delivery method.

Character	Field Name	Description
С	Cash	Populated based on settlement type
Р	Physical	Populated based on settlement type

# 4.2 Foreign exchange - J-F-\*-X-\*-\*-

#### 4.2.1 Category & Group

The first two characters are 'JF'. The applicable products are seen in the section product classification.

#### 4.2.2 First attribute

The first attribute (3<sup>rd</sup> character) provides details of the underlying assets.

Character	Field Name	Description
Т	Spot	Not supported
R	Forward	Selected value for FXForward and FXNDF
0	Options	Not supported
F	Future	Not supported



#### 4.2.3 Second attribute

The second attribute (4th character) is an undefined value which is defaulted to 'X'

#### 4.2.4 Third attribute

The third attribute (5<sup>th</sup> character) provides details of the method used to determine contract value – return or payout trigger.

Character	Field Name	Description
С	Contract for difference	Not applicable
S	Spreadbet	Not applicable
F	Forward price of underlying instrument	Defaulted value

#### 4.2.5 Fourth attribute

The fourth attribute (6<sup>th</sup> character) provides details of the delivery method.

Character	Field Name	Description
С	Cash	Applied when cash settled = true
Р	Physical	Applied when cash settled = false
N	Non-deliverable	Defaulted value for FXNDF



#### 4.3 Rates - J-R-\*-X-\*-\*-

#### 4.3.1 Category & Group

The first two characters are 'JR'. The applicable products are seen in the section product classification.

#### 4.3.2 First attribute

The first attribute (3<sup>rd</sup> character) provides details of the underlying assets.

Character	Field Name	Description
1	Interest Rate Index	Defaulted value
0	Options	Not supported
M	Others	Not supported

#### 4.3.3 Second attribute

The second attribute (4th character) is an undefined value which is defaulted to 'X'

#### 4.3.4 Third attribute

The third attribute (5<sup>th</sup> character) provides details of the method used to determine contract value – return or payout trigger.

Character	Field Name	Description
S	Spreadbet	Not applicable
F	Forward price of underlying instrument	Defaulted value

#### 4.3.5 Fourth attribute

The fourth attribute (6th character) provides details of the delivery method.

Character	Field Name	Description
С	Cash	Based on the product settlement type
P	Physical	Based on the product settlement type



# Category: Non-listed and complex listed options - H-\*-\*-\*-

Non listed and complex listed options are broken down into the following groups.

- R Rates
- T Commodities
- **E** Equity
- C Credit
- F Foreign exchange
- M Others (miscellaneous)

#### 5.1 Rates -H-R-\*-X-\*-\*-

#### 5.1.1 Category & Group

The first two characters are 'HR'. The applicable products are seen in the section product classification.

#### 5.1.2 First attribute

The first attribute (3<sup>rd</sup> character) provides details of the underlying assets.

Character	Field Name	Description
Α	Basis swap	Underlying is a swap here both legs are float
С	Fixed-Floating	Underlying is a swap which contains 1 leg fix / 1 leg float* *Floating leg is not inflation or OIS or Zero Coupon
D	Fixed-Fixed	Underlying is a swap here both legs are fixed
G	Interest Rate Index	Underlying is a swap which contains at least 1 inflation leg Rate index name type is set as inflation



Character	Field Name	Description
Н	Overnight Index Swap	Underlying is a swap which contains at least 1 OIS leg Rate index name type is set as "-OIS"
0	Options	Applied value when underlying is not a swap. For instance, CapFloor
R	Forwards	Not supported
F	Futures	Not supported
М	Others	Underlying is a swap which contains at least 1 Spread leg

#### 5.1.3 Second attribute

The second attribute (4th character) provides details of the option type and style

Character	Field Name	Description
Α	European-Call	Based on option type and style
В	American-Call	Based on option type and style
С	Bermudan-Call	Based on option type and style
D	European-Put	Based on option type and style
E	American-Put	Based on option type and style
F	Bermudan-Put	Based on option type and style
G	European-Chooser	Not supported
Н	American-Chooser	Not supported
1	Bermudan-Chooser	Not supported



#### 5.1.4 Third attribute

The third attribute (5<sup>th</sup> character) provides details of the valuation method or trigger

Character	Field Name	Description
V	Vanilla	Applied when digital = false
Α	Asian	Not applicable
D	Digital	Applied when digital = true
В	Barrier	Not applicable
G	Digital Barrier	Not supported
L	Lookback	Not supported
Р	Other path dependent	Not supported
М	Others	Not supported

#### 5.1.5 Fourth attribute

The fourth attribute (6<sup>th</sup> character) provides details of the delivery method.

Character	Field Name	Description
С	Cash	Populated based on settlement type
Р	Physical	Populated based on settlement type
Е	Elect at exercise	Populated based on settlement type

#### 5.2 Commodities -H-T-\*-\*-\*-

#### 5.2.1 Category & Group

The first two characters are 'HT'. The applicable products are seen in the section product classification.

#### 5.2.2 First attribute

The first attribute (3<sup>rd</sup> character) provides details of the underlying assets.



Character	Field Name	Description
J	Energy	Not implemented
K	Metals	Not implemented
Α	Agriculture	Not implemented
N	Environmental	Not implemented
G	Freight	Not implemented
P	Polypropylene products	Not implemented
S	Fertilizer	Not implemented
Т	Paper	Not implemented
I	Index	Not implemented
Q	Multi Commodity	Not implemented
0	Options	Not implemented
R	Forward	Not implemented
F	Futures	Not implemented
W	Swaps	Not implemented
M	Others	Not implemented
Х	Unknown	Defaulted to X

#### 5.2.3 Second attribute

The second attribute (4th character) provides details of the option type and style

Character	Field Name	Description
А	European-Call	Based on option type and style
В	American-Call	Based on option type and style



Character	Field Name	Description
С	Bermudan-Call	Based on option type and style
D	European-Put	Based on option type and style
E	American-Put	Based on option type and style
F	Bermudan-Put	Based on option type and style
G	European-Chooser	Not supported
Н	American-Chooser	Not supported
I	Bermudan-Chooser	Not supported

#### 5.2.4 Third attribute

The third attribute (5th character) provides details of the valuation method or trigger

Character	Field Name	Description
V	Vanilla	Applied when option style = Standard
A	Asian	Applied when option style = Asian
D	Digital	Applied when option style = Digital
В	Barrier	Applied when option style = Barrier
G	Digital Barrier	Not supported
L	Lookback	Not supported
Р	Other path dependent	Not supported
M	Others	Not supported



#### 5.2.5 Fourth attribute

The fourth attribute (6<sup>th</sup> character) provides details of the delivery method.

Character	Field Name	Description
С	Cash	Populated based on settlement type
Р	Physical	Populated based on settlement type
Е	Elect at exercise	Populated based on settlement type

# 5.3 Equity - H-E-\*-X-\*-\*-

#### 5.3.1 Category & Group

The first two characters are 'HE'. The applicable products are seen in the section product classification.

#### 5.3.2 First attribute

The first attribute (3<sup>rd</sup> character) provides details of the underlying assets.

Character	Field Name	Description
S	Single stock	Applied if underlying is an equity
I	Index	Applied if underlying is an equity index
В	Basket	Applied if underlying is a basket
0	Options	Not applicable
R	Forwards	Not applicable
F	Futures	Not applicable
М	Others	Not applicable



#### 5.3.3 Second attribute

The second attribute (4th character) provides details of the option type and style

Character	Field Name	Description
A	European-Call	Based on option type and style
В	American-Call	Based on option type and style
С	Bermudan-Call	Based on option type and style
D	European-Put	Based on option type and style
E	American-Put	Based on option type and style
F	Bermudan-Put	Based on option type and style
G	European-Chooser	Not supported
Н	American-Chooser	Not supported
I	Bermudan-Chooser	Not supported



#### 5.3.4 Third attribute

The third attribute (5th character) provides details of the valuation method or trigger

Character	Field Name	Description
V	Vanilla	Applied when payout = Vanilla
A	Asian	Applied when payout = Asian
D	Digital	Applied when payout = Digital
В	Barrier	Applied when payout = Barrier
G	Digital Barrier	Not supported
L	Lookback	Not supported
Р	Other path dependent	Not supported
М	Others	applied to other payout options

#### 5.3.5 Fourth attribute

The fourth attribute (6<sup>th</sup> character) provides details of the delivery method.

Character	Field Name	Description
С	Cash	Populated based on payment type
Р	Physical	Populated based on payment type
E	Elect at exercise	Populated based on payment type



#### 5.4 Credit - H-C-\*-\*-\*-

#### 5.4.1 Category & Group

The first two characters are 'HC'. The applicable products are seen in the section product classification.

#### 5.4.2 First attribute

The first attribute (3<sup>rd</sup> character) provides details of the underlying assets.

Character	Field Name	Description
U	CDS on a single name	Applied to CreditDefaultSwaption where option = single name
V	CDS on an index tranche	Applied to CDSIndexTrancheOption
1	CDS on an index	Applied to CDSIndexOption
w	Swaps	Not supported
М	Others	Not supported

#### 5.4.3 Second attribute

The second attribute (4th character) provides details of the option type and style

Character	Field Name	Description
Α	European-Call	Based on option type and style
В	American-Call	Based on option type and style
С	Bermudan-Call	Based on option type and style
D	European-Put	Based on option type and style
E	American-Put	Based on option type and style
F	Bermudan-Put	Based on option type and style
G	European-Chooser	Not supported
н	American-Chooser	Not supported
I	Bermudan-Chooser	Not supported



#### 5.4.4 Third attribute

The third attribute (5th character) provides details of the valuation method or trigger

Character	Field Name	Description
V	Vanilla	Defaulted value
Α	Asian	Not supported
D	Digital	Not supported
В	Barrier	Not supported
G	Digital Barrier	Not supported
L	Lookback	Not supported
Р	Other path dependent	Not supported
М	Others	Not supported

#### 5.4.5 Fourth attribute

The fourth attribute (6<sup>th</sup> character) provides details of the delivery method.

Character	Field Name	Description
С	Cash	Populated based on selected settlement
Р	Physical	Populated based on selected settlement
Е	Elect at exercise	Populated based on selected settlement



### 5.5 Foreign Exchange - H-F-\*-\*-\*-

#### 5.5.1 Category & Group

The first two characters are 'HF'. The applicable products are seen in the section product classification.

#### 5.5.2 First attribute

The first attribute (3<sup>rd</sup> character) provides details of the underlying assets.

Character	Field Name	Description
R	Forwards	Not supported
F	Futures	Not supported
Т	Spot	Always T
V	Volatility	Not supported
М	Others	Not supported

#### 5.5.3 Second attribute

The second attribute (4th character) provides details of the option type and style

Character	Field Name	Description
Α	European-Call	Based on option type and style
В	American-Call	Based on option type and style
С	Bermudan-Call	Based on option type and style
D	European-Put	Based on option type and style
Е	American-Put	Based on option type and style
F	Bermudan-Put	Based on option type and style
G	European-Chooser	Not supported
Н	American-Chooser	Not supported
I	Bermudan-Chooser	Not supported



#### 5.5.4 Third attribute

The third attribute (5<sup>th</sup> character) provides details of the valuation method or trigger

Character	Field Name	Description
V	Vanilla	Applied when strategy = Vanilla
Α	Asian	Applied when strategy = Asian
D	Digital	Applied when strategy = Digital
В	Barrier	Applied when strategy = Barrier
G	Digital Barrier	Applied when strategy = Digital Barrier
L	Lookback	Not supported
Р	Other path dependent	Not supported
M	Others	Applied when strategy = RangeAccrual Applied to FXOption for Precious Metals

#### 5.5.5 Fourth attribute

The fourth attribute (6<sup>th</sup> character) provides details of the delivery method.

Character	Field Name	Description
С	Cash	Populated based on selected settlement
Р	Physical	Populated based on selected settlement
E	Elect at exercise	Populated based on selected settlement
N	Non-deliverable	Applicable to non-deliverable options (NDO)