

# hpl

## API Documentation

August 26, 2014

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# 1 Module hpl.tap

## 1.1 Variables

Name	Description
HPL_TAPLINK_MODE	<b>Value:</b> 0
HPL_TAPNETWORK_MODE	<b>Value:</b> 1
__package__	<b>Value:</b> None
dict_cr_RegFieldsByName	<b>Value:</b> {'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'ALL': {'access': '...'}}
dict_cr_RegPropertiesByName	<b>Value:</b> {'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'addressOffset': 20...}}
dict_fuse_RegFieldsByName	<b>Value:</b> {'Iunit/fp_iunit_hpll_freq': {'access': 'not-available', ...}}
dict_pcu_ConstByName	<b>Value:</b> {'BOOT_FSM_PRE_PCODE_WAKE': {'value': 10}, 'PCODE_INSTR_L...'}
dict_sig_GetModulePath	<b>Value:</b> {'behavioral.double_sync2': {'path': ['soc.tb.soc.par_dd...'}}
dict_tap_EncodingByName	<b>Value:</b> {'AgingPatternTAPonly_CHAIN': {'ir': 274, 'irRtlPath': No...}}
dict_tap_FieldsByEncoding	<b>Value:</b> {0: {'DATA': {'access': 'RO', 'bitOffset': 0, 'bitWidth': ...}}
mname	<b>Value:</b> 'collateral.dynamic.members'
status	<b>Value:</b> 1

## 1.2 Class HplTap

### 1.2.1 Methods

```
__init__(self, mode=0)
```

```
send_cmd(self, tap_params)
```

```
ShiftIr(bin)
```

## 2 Module *hpl\_tap\_dfx\_api*

### 2.1 Variables

Name	Description
<code>__package__</code>	<b>Value:</b> <code>None</code>
<code>dict_cr_RegFieldsByName</code>	<b>Value:</b> <code>{'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'ALL': {'access': '...'}}</code>
<code>dict_cr_RegPropertiesByName</code>	<b>Value:</b> <code>{'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'addressOffset': 20...}}</code>
<code>dict_fuse_RegFieldsByName</code>	<b>Value:</b> <code>{'Iunit/fp_iunit_hpll_freq': {'access': 'not-available', ...}}</code>
<code>dict_pcu_ConstByName</code>	<b>Value:</b> <code>{'BOOT_FSM_PRE_PCODE_WAKE': {'value': 10}, 'PCODE_INSTR.L...'}</code>
<code>dict_sig_GetModulePath</code>	<b>Value:</b> <code>{'.behavioral.double_sync2': {'path': ['soc.tb.soc.par_dd...'}}</code>
<code>dict_tap_EncodingByName</code>	<b>Value:</b> <code>{'AgingPatternTAPonly_CHAIN': {'ir': 274, 'irRtlPath': No...}}</code>
<code>dict_tap_FieldsByEncoding</code>	<b>Value:</b> <code>{0: {'DATA': {'access': 'R0', 'bitOffset': 0, 'bitWidth': ...}}</code>
<code>mname</code>	<b>Value:</b> <code>'collateral.dynamic.members'</code>
<code>status</code>	<b>Value:</b> <code>1</code>

### 2.2 Class *HplTapDfxApi*

object  `hpl_tap_dfx_api.HplTapDfxApi`

#### 2.2.1 Methods

`__init__(self)`

`x.__init__(...)` initializes x; see `help(type(x))` for signature

Overrides: `object.__init__` `exitit`(inherited documentation)

`close(self)`

`remove_last_line_from_string(self, str)`

`send_receive_message(self, msg)`

`get_field_msb(self, IR, agent, field)`

`get_field_lsb(self, IR, agent, field)`

<code>get_field_reset_value(self, IR, agent, field)</code>
------------------------------------------------------------

<code>get_ir_opcode_string(self, IR, agent)</code>
----------------------------------------------------

<code>get_ir_opcode_int(self, IR, agent)</code>
-------------------------------------------------

<code>get_ir_fields(self, IR, agent)</code>
---------------------------------------------

<code>get_dr_total_length(self, IR, agent)</code>
---------------------------------------------------

<code>get_rtl_endpoint(self, IR, agent, field)</code>
-------------------------------------------------------

<code>get_full_dr(self, IR, agent, field, field_dr)</code>
------------------------------------------------------------

<code>get_full_dr_old(self, IR, agent, field, field_dr)</code>
----------------------------------------------------------------

<code>get_tap_PARIR(self, agent)</code>
-----------------------------------------

<code>get_tap_PARDR(self, TAP)</code>
---------------------------------------

<code>get_tap_SERIR(self, agent, slice_num)</code>
----------------------------------------------------

<code>get_tap_SERDR(self, TAP, slice_num)</code>
--------------------------------------------------

<code>get_ir_name(self, ircode, agent)</code>
-----------------------------------------------

<code>get_ir_size(self, agent)</code>
---------------------------------------

<code>get_final_data_register(self, irname, agent, fields_in)</code>
----------------------------------------------------------------------

<code>get_tap_transactions(self, tap_params)</code>
-----------------------------------------------------

### *Inherited from object*

`__delattr__()`, `__format__()`, `__getattr__()`, `__hash__()`, `__new__()`, `__reduce__()`, `__reduce_ex__()`,  
`__repr__()`, `__setattr__()`, `__sizeof__()`, `__str__()`, `__subclasshook__()`

### 2.2.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>__class__</code>	

### 3 Module hpl.tap.engine

#### 3.1 Variables

Name	Description
<code>__package__</code>	<b>Value:</b> None
<code>dict_cr_RegFieldsByName</code>	<b>Value:</b> {'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'ALL': {'access': '...}}
<code>dict_cr_RegPropertiesByName</code>	<b>Value:</b> {'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'addressOffset': 20...
<code>dict_fuse_RegFieldsByName</code>	<b>Value:</b> {'Iunit/fp_iunit_hpll_freq': {'access': 'not-available', ...}}
<code>dict_pcu_ConstByName</code>	<b>Value:</b> {'BOOT_FSM_PRE_PCODE_WAKE': {'value': 10}, 'PCODE_INSTR.L...
<code>dict_sig_GetModulePath</code>	<b>Value:</b> {'behavioral.double_sync2': {'path': ['soc_tb.soc.par_dd...
<code>dict_tap_EncodingByName</code>	<b>Value:</b> {'AgingPatternTAPonly_CHAIN': {'ir': 274, 'irRtlPath': No...
<code>dict_tap_FieldsByEncoding</code>	<b>Value:</b> {0: {'DATA': {'access': 'RO', 'bitOffset': 0, 'bitWidth':...
<code>mname</code>	<b>Value:</b> 'collateral_dynamic_members'
<code>status</code>	<b>Value:</b> 1

#### 3.2 Class HplTapEngine

object └─ **hpl.tap.engine.HplTapEngine**

**Known Subclasses:** `hpl.tap.engine.hpl.TapEngine_taplink`, `hpl.tap.engine.hpl.TapEngine_tapnetwork`

##### 3.2.1 Methods

```
__init__(self, interface=None, api_name='', uiptr=None, field_labels_ena=1)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

*Inherited from object*

`__delattr__()`, `__format__()`, `__getattr__()`, `__hash__()`, `__new__()`, `__reduce__()`, `__reduce_ex__()`,  
`__repr__()`, `__setattr__()`, `__sizeof__()`, `__str__()`, `__subclasshook__()`

**5:Start\_Ir,10:EndIr}**

**TransactShiftIr**(*self*, *bin*, *size*, *labels*)

**TransactShiftDr**(*self*, *bin\_i*, *size*, *labels*, *masks*, *captures*, *strobes*)

**TransactGotoState**(*tap\_state*)

**close**(*self*)

**get\_final\_tap\_data\_register**(*self*, *tap\_params*)

**transactor\_label\_assignment**(*self*, *labels*, *bit0*, *label\_index*, *label\_str*)

**transactor\_strobe\_properties\_assignment**(*self*, *strobe\_bit0*, *properties*,  
*index*, *val*)

**send\_cmd**(*self*, *tap\_params*)

### 3.2.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>__class__</code>	

## 3.3 Class `hpl_TapEngine_taplink`



### 3.3.1 Methods

```
__init__(self, interface=None, api_selector='HplTapDfxApi', uiptr=None,
field_labels_ena=1)
```

`x.__init__(...)` initializes `x`; see `help(type(x))` for signature

Overrides: `object.__init__` `exitit`(inherited documentation)

```
verify_tap_eptarget(self, agent, eptarget)
```

#### *Inherited from object*

`__delattr__()`, `__format__()`, `__getattr__()`, `__hash__()`, `__new__()`, `__reduce__()`, `__reduce_ex__()`,  
`__repr__()`, `__setattr__()`, `__sizeof__()`, `__str__()`, `__subclasshook__()`

#### *5:Start\_Ir,10:EndIr}*

#### *Inherited from hpl.tap.engine.HplTapEngine(Section 3.2)*

`TransactGotoState()`, `TransactShiftDr()`, `TransactShiftIr()`, `close()`, `get_final_tap_data_register()`,  
`send_cmd()`, `transactor_label_assignment()`, `transactor_strobe_properties_assignment()`

### 3.3.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>__class__</code>	

## 3.4 Class `hpl_TapEngine_tapnetwork`

object └

hpl.tap.engine.HplTapEngine └

**hpl.tap.engine.hpl\_TapEngine\_tapnetwork**



### 3.4.1 Methods

```
__init__(self, interface=None, api_selector='HplTapSpfApi', uiptr=None,
field_labels_ena=1)
```

`x.__init__(...)` initializes `x`; see `help(type(x))` for signature

Overrides: `object.__init__` `exitit`(inherited documentation)

```
verify_tap_eptarget(self, agent, eptarget)
```

*Inherited from object*

```
__delattr__(), __format__(), __getattr__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(),
__repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()
```

**5:Start\_Ir,10:EndIr}**

*Inherited from hpl.tap.engine.HplTapEngine(Section 3.2)*

`TransactGotoState()`, `TransactShiftDr()`, `TransactShiftIr()`, `close()`, `get_final_tap_data_register()`,  
`send_cmd()`, `transactor_label_assignment()`, `transactor_strobe_properties_assignment()`

### 3.4.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>__class__</code>	

## 4 Module `hpl_tap_engine_structs`

### 4.1 Variables

Name	Description
<code>__package__</code>	<b>Value:</b> <code>None</code>
<code>dict_cr_RegFieldsByName</code>	<b>Value:</b> {'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'ALL': {'access': '...}}
<code>dict_cr_RegPropertiesByName</code>	<b>Value:</b> {'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'addressOffset': 20...
<code>dict_fuse_RegFieldsByName</code>	<b>Value:</b> {'Iunit/fp_iunit_hpll_freq': {'access': 'not-available', ...}
<code>dict_pcu_ConstByName</code>	<b>Value:</b> {'BOOT_FSM_PRE_PCODE_WAKE': {'value': 10}, 'PCODE_INSTR_L...
<code>dict_sig_GetModulePath</code>	<b>Value:</b> {'behavioral.double_sync2': {'path': ['soc_tb.soc.par_dd...
<code>dict_tap_EncodingByName</code>	<b>Value:</b> {'AgingPatternTAPOnly_CHAIN': {'ir': 274, 'irRtlPath': No...
<code>dict_tap_FieldsByEncoding</code>	<b>Value:</b> {0: {'DATA': {'access': 'RO', 'bitOffset': 0, 'bitWidth':...
<code>mname</code>	<b>Value:</b> <code>'collateral_dynamic_members'</code>
<code>status</code>	<b>Value:</b> <code>1</code>

### 4.2 Class `hpl_tap_transactor_entry`

object └─ `hpl_tap_engine_structs.hpl_tap_transactor_entry`

#### 4.2.1 Methods

```
__init__(self, state, sequence, sequence_size=-1, tag='', bit0=-1,
strobe_bit0=-1)

x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

*Inherited from object*

`__delattr__()`, `__format__()`, `__getattribute__()`, `__hash__()`, `__new__()`, `__reduce__()`, `__reduce_ex__()`,  
`__repr__()`, `__setattr__()`, `__sizeof__()`, `__str__()`, `__subclasshook__()`

#### 4.2.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>__class__</code>	

### 4.3 Class `hpl.ta.history`

object └─ **`hpl.tap_engine_structs.hpl.ta.history`**

#### 4.3.1 Methods

<b><code>__init__(self)</code></b> <code>x.__init__(...)</code> initializes <code>x</code> ; see <code>help(type(x))</code> for signature Overrides: <code>object.__init__</code> extit(inherited documentation)
<b><code>has(self, irname, agent)</code></b>
<b><code>add(self, irname, agent, field, val)</code></b>
<b><code>has_field(self, irname, agent, field)</code></b>
<b><code>get(self, irname, agent, field)</code></b>

#### *Inherited from object*

`__delattr__()`, `__format__()`, `__getattribute__()`, `__hash__()`, `__new__()`, `__reduce__()`, `__reduce_ex__()`,  
`__repr__()`, `__setattr__()`, `__sizeof__()`, `__str__()`, `__subclasshook__()`

#### 4.3.2 Properties

Name	Description
<i>Inherited from object</i>	

*continued on next page*

Name	Description
<code>__class__</code>	

#### 4.4 Class `hpl_tap_engine_params`



##### 4.4.1 Methods

```

__init__(self, irname, agent, read_type, eptarget='')
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)

```

##### *Inherited from object*

```

__delattr__(), __format__(), __getattr__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(),
__repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()

```

##### 4.4.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>__class__</code>	

## 5 Module hpl\_tap\_spf\_api

### 5.1 Functions

<code>get_tap_transactions(<i>self</i>, <i>tap_params</i>)</code>
-------------------------------------------------------------------

### 5.2 Variables

Name	Description
<code>--package--</code>	<b>Value:</b> None
<code>dict_cr_RegFieldsByName</code>	<b>Value:</b> { 'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': { 'ALL': { 'access': '...'
<code>dict_cr_RegPropertiesByName</code>	<b>Value:</b> { 'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': { 'addressOffset': 20...
<code>dict_fuse_RegFieldsByName</code>	<b>Value:</b> { 'Iunit/fp_iunit_hpll_freq': { 'access': 'not-available', ...
<code>dict_pcu_ConstByName</code>	<b>Value:</b> { 'BOOT_FSM_PRE_PCODE_WAKE': { 'value': 10}, 'PCODE_INSTR.L...
<code>dict_sig_GetModulePath</code>	<b>Value:</b> { '.behavioral.double.sync2': { 'path': ['soc.tb.soc.par.dd...
<code>dict_tap_EncodingByName</code>	<b>Value:</b> { 'AgingPatternTAPonly_CHAIN': { 'ir': 274, 'irRtlPath': No...
<code>dict_tap_FieldsByEncoding</code>	<b>Value:</b> { 0: { 'DATA': { 'access': 'RO', 'bitOffset': 0, 'bitWidth':...
<code>mname</code>	<b>Value:</b> 'collateral_dynamic_members'
<code>status</code>	<b>Value:</b> 1

### 5.3 Class HplTapSpfApi

```

object └─
          hpl_tap_spf_api.HplTapSpfApi

```

### 5.3.1 Methods

`__init__(self)`

`x.__init__(...)` initializes `x`; see `help(type(x))` for signature

Overrides: `object.__init__` `exitit`(inherited documentation)

`close(self)`

`get_field_msb(self, IR, field)`

`get_field_lsb(self, IR, field)`

`get_field_reset_value(self, IR, field)`

`get_ir_opcode(self, IR)`

`get_ir_fields(self, IR)`

`get_dr_total_length(self, IR)`

`get_rtl_endpoint(self, TAP, IR, field)`

`get_full_dr(self, IR, field, field_dr)`

`get_full_dr_old(self, IR, field, field_dr)`

`get_tap_PARIR(self, TAP)`

`get_tap_PARDR(self, TAP)`

#### *Inherited from object*

`__delattr__()`, `__format__()`, `__getattr__()`, `__hash__()`, `__new__()`, `__reduce__()`, `__reduce_ex__()`,  
`__repr__()`, `__setattr__()`, `__sizeof__()`, `__str__()`, `__subclasshook__()`

### 5.3.2 Properties

Name	Description
<i>Inherited from object</i>	

*continued on next page*

Name	Description
__class__	

## 6 Module *htd\_hpl\_itpp\_interface*

### 6.1 Variables

Name	Description
<code>__package__</code>	<b>Value:</b> None
<code>dict_cr_RegFieldsByName</code>	<b>Value:</b> {'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'ALL': {'access': '...'}}
<code>dict_cr_RegPropertiesByName</code>	<b>Value:</b> {'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'addressOffset': 20...
<code>dict_fuse_RegFieldsByName</code>	<b>Value:</b> {'Iunit/fp_iunit_hpll_freq': {'access': 'not-available', ...
<code>dict_pcu_ConstByName</code>	<b>Value:</b> {'BOOT_FSM_PRE_PCODE_WAKE': {'value': 10}, 'PCODE_INSTR.L...
<code>dict_sig_GetModulePath</code>	<b>Value:</b> {'behavioral.double_sync2': {'path': ['soc_tb.soc.par_dd...
<code>dict_tap_EncodingByName</code>	<b>Value:</b> {'AgingPatternTAPonly_CHAIN': {'ir': 274, 'irRtlPath': No...
<code>dict_tap_FieldsByEncoding</code>	<b>Value:</b> {0: {'DATA': {'access': 'RO', 'bitOffset': 0, 'bitWidth':...
<code>mname</code>	<b>Value:</b> 'collateral_dynamic_members'
<code>status</code>	<b>Value:</b> 1

### 6.2 Class *hpl\_itpp\_interface*

object └─ `htd_hpl_itpp_interface.hpl_itpp_interface`

#### 6.2.1 Methods

```
__init__(self, filename, uiptr)  
  
x.__init__(...) initializes x; see help(type(x)) for signature  
Overrides: object.__init__ extit(inherited documentation)
```

```
add_comment(self, line)
```



```
set_pattern_info(self, message)
```

```
signal_force(self, full_path, value)
```

```
signal_unforce(self, full_path, value)
```

```
signal_peek(self, full_path)
```

```
signal_poke(self, full_path, value)
```

```
check_signal(self, full_path, value)
```

```
set_signal(self, full_path, value)
```

```
set_signal_pulse(self, full_path, active_value, width_in_vec_clocks, clockname)
```

```
signal_wait(self, full_path, value, WidthInVecClocks, clockname)
```

```
wait_clock_num(self, width, clock)
```

```
wait_clock_edge(self, clock, edge)
```

```
wait_clock_modulo(self, clock, modulo)
```

```
tap_parameters_instrumental_print(self, param, tapobj)
```

```
check_tap_ep(self, tap_params, waitcycles, refclock, tapobj)
```

```
label(self, label)
```

```
to_state(self, to_state)
```

```
ShiftIr(self, bin, size, labels)
```

```
ShiftDr(self, bin, size, labels, masks, captures, strobes)
```

```
tap_verify(self, param, tapobj)
```

*Inherited from object*

`__delattr__()`, `__format__()`, `__getattr__()`, `__hash__()`, `__new__()`, `__reduce__()`, `__reduce_ex__()`,  
`__repr__()`, `__setattr__()`, `__sizeof__()`, `__str__()`, `__subclasshook__()`

### 6.2.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>__class__</code>	

## 7 Module *htd\_hpl\_signal\_manager*

### 7.1 Variables

Name	Description
<code>__package__</code>	<b>Value:</b> None
<code>dict_cr_RegFieldsByName</code>	<b>Value:</b> {'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'ALL': {'access': '...'}}
<code>dict_cr_RegPropertiesByName</code>	<b>Value:</b> {'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'addressOffset': 20...
<code>dict_fuse_RegFieldsByName</code>	<b>Value:</b> {'Iunit/fp_iunit_hpll_freq': {'access': 'not-available', ...
<code>dict_pcu_ConstByName</code>	<b>Value:</b> {'BOOT_FSM_PRE_PCODE_WAKE': {'value': 10}, 'PCODE_INSTR.L...
<code>dict_sig_GetModulePath</code>	<b>Value:</b> {'behavioral.double_sync2': {'path': ['soc_tb.soc.par_dd...
<code>dict_tap_EncodingByName</code>	<b>Value:</b> {'AgingPatternTAPonly_CHAIN': {'ir': 274, 'irRtlPath': No...
<code>dict_tap_FieldsByEncoding</code>	<b>Value:</b> {0: {'DATA': {'access': 'RO', 'bitOffset': 0, 'bitWidth':...
<code>mname</code>	<b>Value:</b> 'collateral_dynamic_members'
<code>status</code>	<b>Value:</b> 1

### 7.2 Class *hpl.SignalManager*

object └─ **htd\_hpl\_signal\_manager.hpl.SignalManager**

**Known Subclasses:** *htd\_hpl\_signal\_manager.hpl.SignalManager\_interactive*, *htd\_hpl\_signal\_manager.hpl...*

#### 7.2.1 Methods

```
__init__(self, interactive_mode, interface=None, uiptr=None)
```

*x.\_\_init\_\_*(...) initializes *x*; see `help(type(x))` for signature

Overrides: `object.__init__` `exitit`(inherited documentation)

```
is_interactive_mode(self)
```

```
signal_exists(self, search_signal)
```

```
signal_peek(self, signal_path, lsb, msb, selector='none')
```

```
signal_poke(signal_path, lsb, msb, value, selector='none')
```

```
signal_check(self, signal_path, lsb, msb, value, selector)
```

```
signal_module_exists(self, search_module)
```

```
extract_full_signal_path(self, signal_path, lsb, msb, selector='.'))
```

```
resize_list(l, newsize, filling=None)
```

### *Inherited from object*

```
__delattr__(), __format__(), __getattr__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(),  
__repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()
```

### 7.2.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>__class__</code>	

## 7.3 Class `hpl.SignalManager_interactive`



### 7.3.1 Methods

```
__init__(self, interface=None, uiptr=None)
```

```
x.__init__(...) initializes x; see help(type(x)) for signature
```

```
Overrides: object.__init__ extit(inherited documentation)
```

**Inherited from `htd_hpl_signal_manager.hpl.SignalManager`(Section 7.2)**

`extract_full_signal_path()`, `is_interactive_mode()`, `resize_list()`, `signal_check()`, `signal_exists()`, `signal_module_exists()`, `signal_peek()`, `signal_poke()`

**Inherited from `object`**

`__delattr__()`, `__format__()`, `__getattr__()`, `__hash__()`, `__new__()`, `__reduce__()`, `__reduce_ex__()`, `__repr__()`, `__setattr__()`, `__sizeof__()`, `__str__()`, `__subclasshook__()`

**7.3.2 Properties**

Name	Description
<i>Inherited from <code>object</code></i>	
<code>__class__</code>	

**7.4 Class `hpl.SignalManager_non_interactive`**

`object` └─

`htd_hpl_signal_manager.hpl.SignalManager` └─ `htd_hpl_signal_manager.hpl.SignalManager_non_interactive`

**Known Subclasses:** `htd_hpl_signal_manager.hpl.SignalManager_itpp`

**7.4.1 Methods**

**`__init__(self, interface, wiptr=None)`**

`x.__init__(...)` initializes `x`; see `help(type(x))` for signature

Overrides: `object.__init__` extit(inherited documentation)

**`signal_exists(self, search_signal)`**

Overrides: `htd_hpl_signal_manager.hpl.SignalManager.signal_exists`

**`signal_peek(self, signal_path, lsb, msb, selector='none')`**

Overrides: `htd_hpl_signal_manager.hpl.SignalManager.signal_peek`

**`signal_force(self, signal_path, lsb, msb, value, selector='')`**

```
signal_unforce(self, signal_path, lsb, msb, selector='')
```

```
signal_poke(self, signal_path, lsb, msb, value, selector='')
```

Overrides: `htd_hpl_signal_manager.hpl.SignalManager.signal_poke`

```
signal_check(self, signal_path, lsb, msb, value, selector)
```

Overrides: `htd_hpl_signal_manager.hpl.SignalManager.signal_check`

```
signal_pulse(self, signal_path, lsb, msb, active_value, width, clock, selector)
```

```
signal_wait(self, signal_path, lsb, msb, value, waitLimit, wait_clk='none',
selector='none')
```

```
signal_serial_set(self, signal_path, lsb, msb, value, width, clock,
selector='none')
```

*Inherited from `htd_hpl_signal_manager.hpl.SignalManager`(Section 7.2)*

`extract_full_signal_path()`, `is_interactive_mode()`, `resize_list()`, `signal_module_exists()`

*Inherited from object*

`__delattr__()`, `__format__()`, `__getattr__()`, `__hash__()`, `__new__()`, `__reduce__()`, `__reduce_ex__()`,  
`__repr__()`, `__setattr__()`, `__sizeof__()`, `__str__()`, `__subclasshook__()`

#### 7.4.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>__class__</code>	

### 7.5 Class `hpl.SignalManager_itpp`

object └

`htd_hpl_signal_manager.hpl.SignalManager` └

`htd_hpl_signal_manager.hpl.SignalManager_non_interactive` └

`htd_hpl_signal_manager.hpl.SignalManager`

### 7.5.1 Methods

**`__init__`**(*self*, *interface*=None, *uiptr*=None)  
`x.__init__(...)` initializes `x`; see `help(type(x))` for signature  
 Overrides: `object.__init__` `exitit`(inherited documentation)

***Inherited from `htd_hpl_signal_manager.hpl.SignalManager_non_interactive`(Section 7.4)***

`signal_check()`, `signal_exists()`, `signal_force()`, `signal_peek()`, `signal_poke()`, `signal_pulse()`,  
`signal_serial_set()`, `signal_unforce()`, `signal_wait()`

***Inherited from `htd_hpl_signal_manager.hpl.SignalManager`(Section 7.2)***

`extract_full_signal_path()`, `is_interactive_mode()`, `resize_list()`, `signal_module_exists()`

***Inherited from `object`***

`__delattr__()`, `__format__()`, `__getattr__()`, `__hash__()`, `__new__()`, `__reduce__()`, `__reduce_ex__()`,  
`__repr__()`, `__setattr__()`, `__sizeof__()`, `__str__()`, `__subclasshook__()`

### 7.5.2 Properties

Name	Description
<i>Inherited from <code>object</code></i>	
<code>__class__</code>	

## 8 Module *htd\_player\_top*

### 8.1 Variables

Name	Description
<code>htdPlayer</code>	<b>Value:</b> <code>htd_player_ui()</code>
<code>__package__</code>	<b>Value:</b> <code>None</code>
<code>dict_cr_RegFieldsByName</code>	<b>Value:</b> {'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'ALL': {'access': '...
<code>dict_cr_RegPropertiesByName</code>	<b>Value:</b> {'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'addressOffset': 20...
<code>dict_fuse_RegFieldsByName</code>	<b>Value:</b> {'Iunit/fp_iunit_hpll_freq': {'access': 'not-available', ...
<code>dict_pcu_ConstByName</code>	<b>Value:</b> {'BOOT_FSM_PRE_PCODE_WAKE': {'value': 10}, 'PCODE_INSTR.L...
<code>dict_sig_GetModulePath</code>	<b>Value:</b> {'behavioral.double_sync2': {'path': ['soc_tb.soc.par_dd...
<code>dict_tap-EncodingByName</code>	<b>Value:</b> {'AgingPatternTAPonly_CHAIN': {'ir': 274, 'irRtlPath': No...
<code>dict_tap_FieldsByEncoding</code>	<b>Value:</b> {0: {'DATA': {'access': 'RO', 'bitOffset': 0, 'bitWidth':...
<code>mname</code>	<b>Value:</b> <code>'collateral_dynamic_members'</code>
<code>status</code>	<b>Value:</b> <code>1</code>



## 9 Module *htd.player\_ui*

### 9.1 Variables

Name	Description
<code>__package__</code>	<b>Value:</b> None
<code>dict_cr_RegFieldsByName</code>	<b>Value:</b> {'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'ALL': {'access': '...'}}
<code>dict_cr_RegPropertiesByName</code>	<b>Value:</b> {'ACMODE_SAVE_FSCP_PM_REDIRECTIONS': {'addressOffset': 20...
<code>dict_fuse_RegFieldsByName</code>	<b>Value:</b> {'Iunit/fp_iunit_hpll_freq': {'access': 'not-available', ...}
<code>dict_pcu_ConstByName</code>	<b>Value:</b> {'BOOT_FSM_PRE_PCODE_WAKE': {'value': 10}, 'PCODE_INSTR.L...
<code>dict_sig_GetModulePath</code>	<b>Value:</b> {'behavioral.double_sync2': {'path': ['soc_tb.soc.par_dd...
<code>dict_tap_EncodingByName</code>	<b>Value:</b> {'AgingPatternTAPonly_CHAIN': {'ir': 274, 'irRtlPath': No...
<code>dict_tap_FieldsByEncoding</code>	<b>Value:</b> {0: {'DATA': {'access': 'RO', 'bitOffset': 0, 'bitWidth':...
<code>mname</code>	<b>Value:</b> 'collateral_dynamic_members'
<code>status</code>	<b>Value:</b> 1

### 9.2 Class *htd.tap\_params*

object └─ *htd.player\_ui.htd.tap\_params*

#### 9.2.1 Methods

```
__init__(self)
x.__init__(...) initializes x; see help(type(x)) for signature
Overrides: object.__init__ extit(inherited documentation)
```

#### *Inherited from object*

```
__delattr__(), __format__(), __getattr__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(),
__repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()
```

### 9.2.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>__class__</code>	

## 9.3 Class `htd_player_ui`



### 9.3.1 Methods

`__init__(self)`

`x.__init__(...)` initializes `x`; see `help(type(x))` for signature

Overrides: `object.__init__` `extit`(inherited documentation)

`close(self)`

`add_comment(self, line)`

`set_pattern_info(self, message)`

`get_ir_opcode_int(self, cmd, agent)`

`get_ir_name(self, ircode, agent)`

`get_tapreg_fields(self, cmd, agent)`

`tap_send_cmd(self, tap_params)`

`verify_tap_eptarget(self, agent, eptarget)`

`get_full_signal_path(self, signal, selector='')`

`signal_module_exists(self, search_signal_or_module)`

```
signal_peek(self, signal_path, lsb, msb, selector='none')
```

```
signal_poke(self, signal_path, lsb, msb, value, selector='none')
```

```
signal_force(self, signal_path, lsb, msb, value, selector='none')
```

```
signal_unforce(self, signal_path, lsb, msb, selector='none')
```

```
signal_check(self, signal_path, lsb, msb, value, selector='none')
```

```
signal_pulse(self, signal_path, lsb, msb, active_value, width=1, clock='none',
selector='none')
```

```
signal_wait(self, signal_path, lsb, msb, value, waitLimit, wait_clk='none',
selector='none')
```

```
signal_serial_set(self, signal_path, lsb, msb, value, width, clock='none',
selector='none')
```

```
wait_clock_num(self, cycles, clock='none')
```

```
wait_clock_edge(self, clock, edge)
```

```
sync_to_clock_modulo(self, clock, modulo)
```

### *Inherited from object*

```
__delattr__(), __format__(), __getattr__(), __hash__(), __new__(), __reduce__(), __reduce_ex__(),
__repr__(), __setattr__(), __sizeof__(), __str__(), __subclasshook__()
```

### 9.3.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>__class__</code>	

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