PreFilter

- curSample : int*
pf_decima_input[]: fract32
pf_decima_output[]: fract32
pf_decima_count: uint
pf_hp_output[]: fract32
pf_decima_coeffs[]: fract32
pf_decima_delay[]: fract32
pf_decima_state: fir_state_fr32

- recBufPtr : RecBuf*

pf_initDecima(void): void
pf_initHighPass(void): void
pf_sampleReady(fract32): void

RecBuf

 $rb_currActiveBuffer: bool$

rb_ready: bool

rb_index: unsigned int

rb_mem0 []: fract32
rb mem1[]: fract32

- analyzePtr : Analyzer*

rb init(void): void

rb storeData(fract32): void

Analyzer

- recBufPtr : RecBuf*

- catPtr : Categorizer*an curBufRdy: bool

an_freqSpec[]: fract32

 $an_freqSpecdB[]: float$

an_tpr: float

+ analyze(uint, uint) : void

an_init(void): void

an_analyze(bool): void

an_calcSPL(void): float

an_calcFFT(void): void
an g2dB(void): void

an_smooth(uint): void

TwoWireCom

tw_init(void): void
tw send(int): void

Categorizer

- freqSpecPtr: int*

- statPtr :Statistician*
cg babyCon: int

cg dBroadThreshHighBC1: float

cg_dBroadThreshLowBC2: float

 $cg_dBroadThreshHighBC2: float$

cg dBroad: float

cg_broadFreqLow: uint

 $cg_broadFreqHigh: uint$

cg_firstPeakFreqBC1: uint

 $cg_secondPeakFreqBC1: uint$

 $cg_freqMargin: uint$

cg_margin: uint

cg_broadStart: uint

 $cg_broadEnd: uint$

cg_BC1First: uint

cg_BC1Second: uint cg_init(void): void

cg categorize(void): void

cg_checkBC1(void): bool

cg_checkBC2(void): bool

Statistician

- twcPtr: TwoWireCom*

ss_bc: int

 $ss_significans: int\\$

ss_bbyCon1: int

ss_bbyCon2: int ss_bbyCon3: int

ss_sigContainer[]: int

ss_init(void): void

ss_calcSignificans(int): void