DMA_InitTypeDef

+ Channel
+ Direction
+ PeriphInc
+ MemInc
+ PeriphDataAlignment
+ MemDataAlignment
+ Mode
+ Priority
+ FIFOMode
+ FIFOThreshold
+ MemBurst
+ PeriphBurst

DMA_Stream_TypeDef

+ CR
+ NDTR
+ PAR
+ M0AR
+ M1AR
+ FCR

__DMA_HandleTypeDef

+ Lock
+ State
+ Parent
+ XferCpltCallback
+ XferHalfCpltCallback
+ XferM1CpltCallback
+ XferM1HalfCpltCallback
+ XferErrorCallback
+ XferAbortCallback
+ ErrorCode
+ StreamBaseAddress
+ StreamIndex

+Instance   +Init

SPI_TypeDef

+ CR1
+ CR2
+ SR
+ DR
+ CRCPR
+ RXCRCR
+ TXCRCR
+ I2SCFGR
+ I2SPR

I2S_InitTypeDef

+ Mode
+ Standard
+ DataFormat
+ MCLKOutput
+ AudioFreq
+ CPOL
+ ClockSource
+ FullDuplexMode

+hdmarx
+hdmatx

+Instance   +Init

__I2S_HandleTypeDef

+ pTxBuffPtr
+ TxXferSize
+ TxXferCount
+ pRxBuffPtr
+ RxXferSize
+ RxXferCount
+ IrqHandlerISR
+ Lock
+ State
+ ErrorCode