Class Allocator

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- Defined in File allocator.hpp

Inheritance Relationships

Base Type

- `public holoscan::gxf::GXFResource` (Class GXFResource)

Derived Types

- `public holoscan::BlockMemoryPool` (Class BlockMemoryPool)
- `public holoscan::CudaStreamPool` (Class CudaStreamPool)
- `public holoscan::UnboundedAllocator` (Class UnboundedAllocator)

Class Documentation

class Allocator : public holoscan::gxf::GXFResource

Base class for all allocators.

Allocators are used to allocate resources such as memory or CUDA threads.

Subclassed by holoscan::BlockMemoryPool, holoscan::CudaStreamPool, holoscan::UnboundedAllocator

Public Functions

template<typename ArgT, typename ...ArgsT, typename = std::enable_if_t<!std::is_base_of_v<::holoscan::Resource, std::decay_t<ArgT>> && (std::is_same_v<::holoscan::Arg, std::decay_t<ArgT>> || std::is_same_v<::holoscan::ArgList, std::decay_t<ArgT>>)>>
inline Allocator(ArgT &&arg, ArgsT&&... args)

Allocator() = default

Allocator(const std::string &name, nvidia::gxf::Allocator *component)

inline virtual const char *gxf_typename() const override

virtual bool is_available(uint64_t size)

virtual nvidia::byte *allocate(uint64_t size, MemoryStorageType type)

virtual void free(nvidia::byte *pointer)

uint64_t block_size()

nvidia::gxf::Allocator *get() const