

# cuBLAS Functions

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# Chapter 1

## Level-1 Functions

<type>	<t>	Meaning
float	s or S	real single-precision
double	d or D	real double-precision
cuComplex	c or C	complex single-precision
cuDoubleComplex	z or Z	complex double-precision

General cuBLAS function name structure: `cublas<return type><input type><name>`

```
1 // Generic name: cublasI<t>amax()
2
3 cublasStatus_t cublasIsamax(cublasHandle_t handle, int n, const float* x, int incx,
4     → int* result);
4 cublasStatus_t cublasIdamax(cublasHandle_t handle, int n, const double* x, int incx,
5     → int* result);
5 cublasStatus_t cublasIcamax(cublasHandle_t handle, int n, const cuComplex* x, int
6     → incx, int* result);
6 cublasStatus_t cublasIzamax(cublasHandle_t handle, int n, const cuDoubleComplex* x,
    → int incx, int* result);
```

Description: Finds the smallest index of the element with the maximum magnitude.