BLAS Benchmakring for AM572x

BLAS configurations:

Storage: column major	Transpose: none	Conjugate: none
Upper/low: low	Side: left	Diagonal: non-unit

gflops

	BLAS_sgemm_nn_ccc	BLAS_dgemm_nn_ccc	BLAS_cgemm_nn_ccc	BLAS_zgemm_nn_ccc
500	7.601	3.43	12.083	1.942
750	11.366	3.375	11.552	1.958
1000	12.733	3.639	12.601	2.086
1250	12.33	3.821	12.772	2.07
1500	12.966	3.71	12.765	2.088

gflops

	BLAS_chemm_llnn_ccc	BLAS_zhemm_llnn_ccc
500	12.17	1.946
750	11.619	1.965
1000	12.678	2.095
1250	12.886	2.078
1500	12.845	2.095

gflops

	BLAS_cherk_ln_cc	BLAS_zherk_ln_cc
500	8.602	1.514
750	9.127	1.6
1000	10.215	1.766
1250	10.898	1.78
1500	10.937	1.787

gflops

	BLAS_cher2k_lnn_ccc	BLAS_zher2k_lnn_ccc
500	8.63	1.516
750	9.147	1.601
1000	10.239	1.767
1250	10.925	1.78
1500	10.946	1.787

gflops

	BLAS_ssymm_llnn_ccc	BLAS_dsymm_llnn_ccc	BLAS_csymm_llnn_ccc	BLAS_zsymm_llnn_ccc
500	8.059	3.497	12.155	1.948
750	11.704	3.402	11.621	1.966
1000	12.812	3.668	12.678	2.096
1250	12.449	3.847	12.887	2.079
1500	13.096	3.755	12.846	2.096

gflops

	BLAS_ssyrk_ln_cc	BLAS_dsyrk_ln_cc	BLAS_csyrk_ln_cc	BLAS_zsyrk_ln_cc
500	4.961	2.473	8.463	1.512
750	6.65	2.796	9.081	1.601
1000	9.172	3.029	10.14	1.767
1250	9.752	3.238	10.848	1.781
1500	10.32	3.289	10.911	1.788

gflops

	BLAS_ssyr2k_lnn_ccc	BLAS_dsyr2k_lnn_ccc	BLAS_csyr2k_lnn_ccc	BLAS_zsyr2k_lnn_ccc
500	6.159	2.502	8.551	1.518
750	5.762	2.811	9.109	1.603
1000	9.186	3.039	10.168	1.769
1250	9.721	3.249	10.873	1.782
1500	10.342	3.292	10.913	1.788

gflops

	BLAS_strmm_llnn_cc	BLAS_dtrmm_llnn_cc	BLAS_ctrmm_llnn_cc	BLAS_ztrmm_llnn_cc
500	6.442	2.484	7.858	1.248
750	6.71	2.734	8.722	1.384
1000	9.335	2.983	9.673	1.468
1250	9.413	3.175	9.992	1.518
1500	10.102	3.182	10.458	1.572

gflops

	BLAS_strsm_llnn_cc	BLAS_dtrsm_llnn_cc	BLAS_ctrsm_llnn_cc	BLAS_ztrsm_llnn_cc
500	5.674	2.273	7.652	1.578
750	6.17	2.551	8.57	1.756
1000	6.876	2.837	9.479	1.862
1250	7.123	3.028	9.758	1.925
1500	7.796	3.056	10.16	2.011

xGEMM

gflops

% BLAS_<dt><oper>_<params>_<storage>
- BLAS_sgemm_nn_ccc
- BLAS_dgemm_nn_ccc
- BLAS_cgemm_nn_ccc
- BLAS_zgemm_nn_ccc

m

xHERK

gflops

% BLAS_<dt><oper>_<params>_<storage>
- BLAS_cherk_ln_cc
- BLAS_zherk_ln_cc

m

xSYMM

gflops

% BLAS_<dt><oper>_<params>_<storage>

- BLAS_ssymm_llnn_ccc
- BLAS_dsymm_llnn_ccc
- BLAS_csymm_llnn_ccc
- BLAS_zsymm_llnn_ccc

m

xSYR2K

gflops

% BLAS_<dt><oper>_<params>_<storage>

- BLAS_ssyr2k_lnn_ccc
- BLAS_dsyr2k_lnn_ccc
- BLAS_csyr2k_lnn_ccc
- BLAS_zsyr2k_lnn_ccc

m

xTRSM

gflops

m

% BLAS_<dt><oper>_<params>_<storage>

- BLAS_strsm_llnn_cc
- BLAS_dtrsm_llnn_cc
- BLAS_ctrsm_llnn_cc
- BLAS_ztrsm_llnn_cc

xHEMM

gflops

% BLAS_<dt><oper>_<params>_<storage>

BLAS_chemm_llnn_ccc
BLAS_zhemm_llnn_ccc

m

xHER2K

gflops

% BLAS_<dt><oper>_<params>_<storage>

BLAS_cher2k_lnn_ccc
BLAS_zher2k_lnn_ccc

m

xSYRK

gflops

% BLAS_<dt><oper>_<params>_<storage>

- BLAS_ssyrk_ln_cc
- BLAS_dsyrk_ln_cc
- BLAS_csyrk_ln_cc
- BLAS_zsyrk_ln_cc

m

xTRMM

gflops

% BLAS_<dt><oper>_<params>_<storage>

- BLAS_strmm_llnn_cc
- BLAS_dtrmm_llnn_cc
- BLAS_ctrmm_llnn_cc
- BLAS_ztrmm_llnn_cc

m