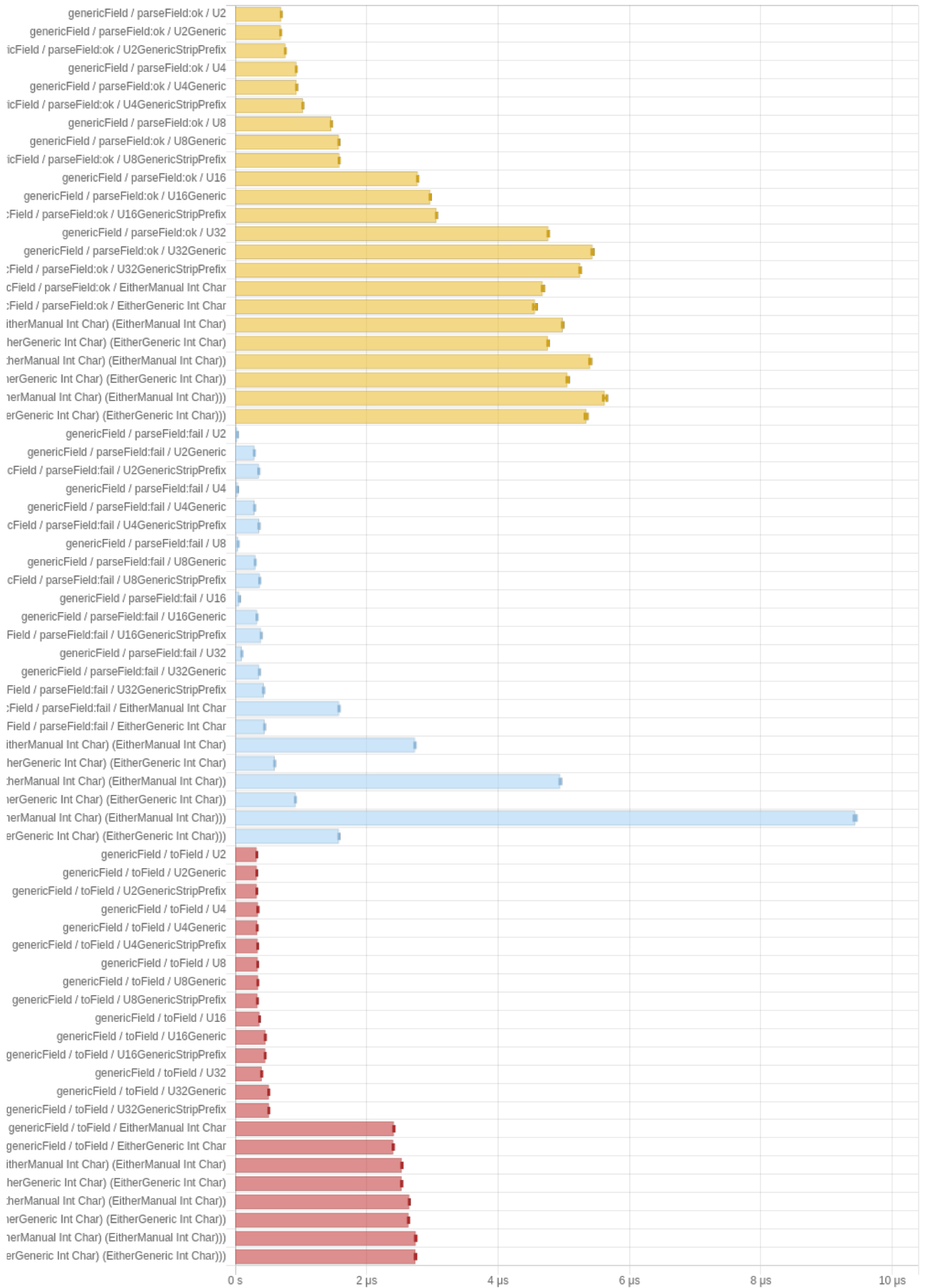
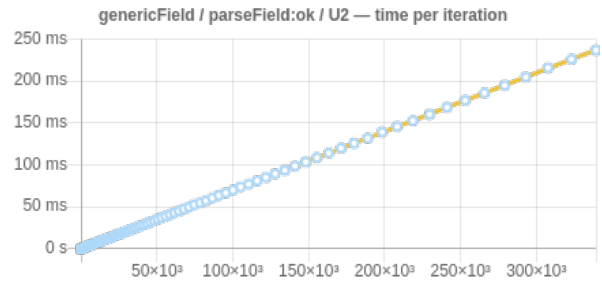
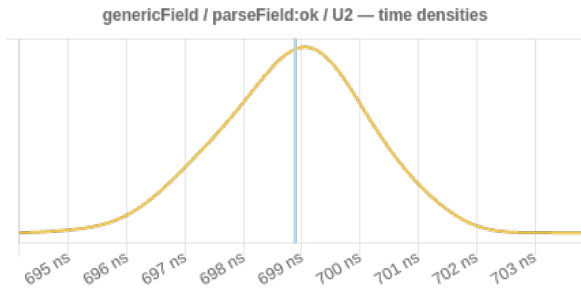


criterion performance measurements

overview



genericField / parseField:ok / U2

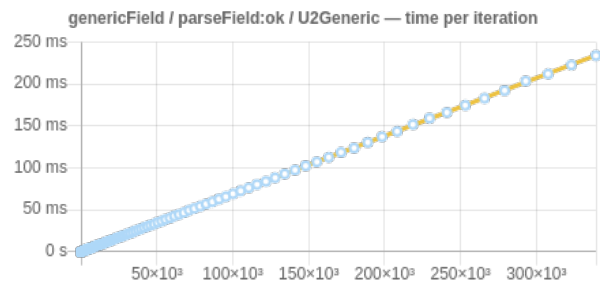
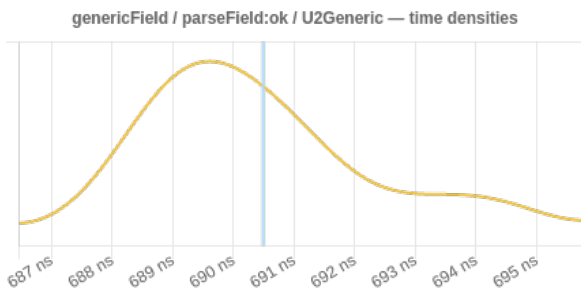


lower bound estimate upper bound

OLS regression	699 ns	699 ns	700 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	698 ns	699 ns	699 ns
Standard deviation	1.13 ns	1.43 ns	1.93 ns

Outlying measurements have no (0.455%) effect on estimated standard deviation.

genericField / parseField:ok / U2Generic

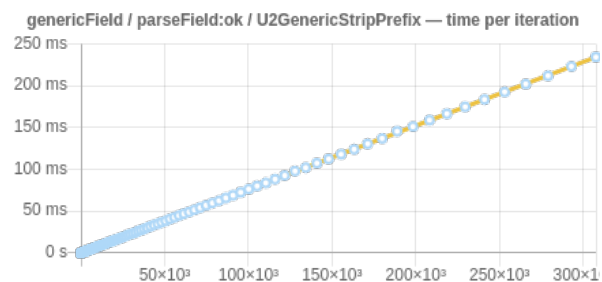
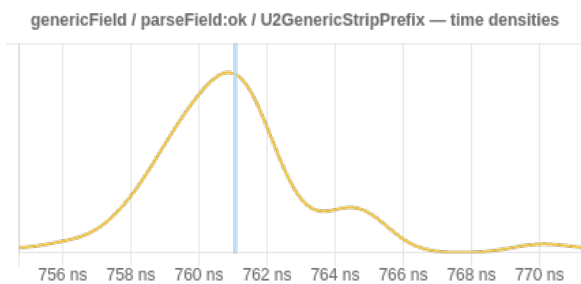


lower bound estimate upper bound

OLS regression	689 ns	690 ns	691 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	690 ns	690 ns	691 ns
Standard deviation	1.53 ns	1.90 ns	2.32 ns

Outlying measurements have no (0.455%) effect on estimated standard deviation.

genericField / parseField:ok / U2GenericStripPrefix

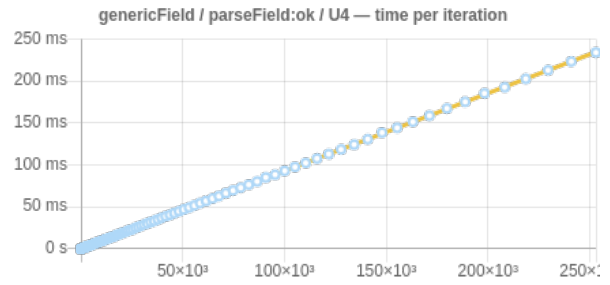
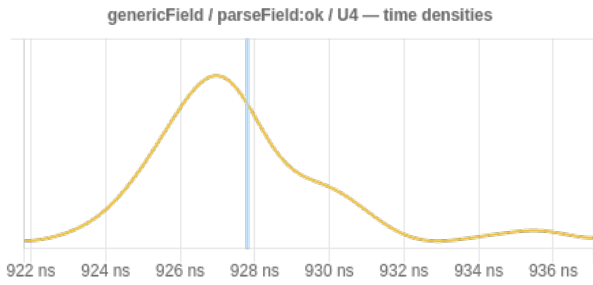


lower bound estimate upper bound

OLS regression	760 ns	761 ns	762 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	760 ns	761 ns	762 ns
Standard deviation	1.78 ns	2.37 ns	3.54 ns

Outlying measurements have no (0.459%) effect on estimated standard deviation.

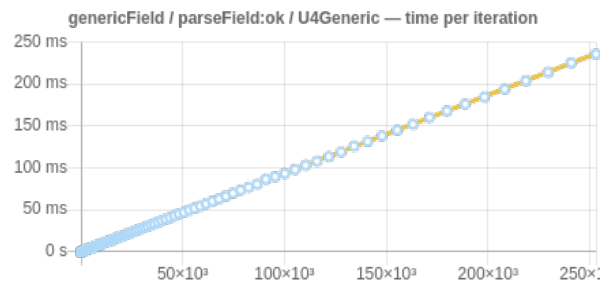
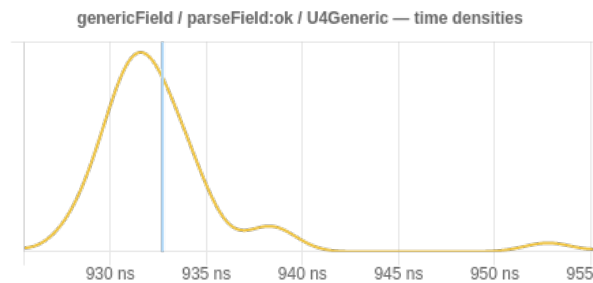
genericField / parseField:ok / U4



	lower bound	estimate	upper bound
OLS regression	926 ns	927 ns	929 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	927 ns	928 ns	929 ns
Standard deviation	1.96 ns	2.66 ns	3.51 ns

Outlying measurements have no (0.467%) effect on estimated standard deviation.

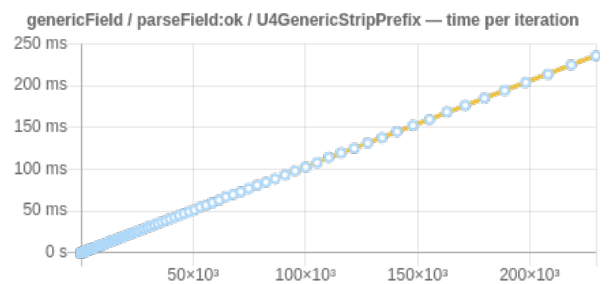
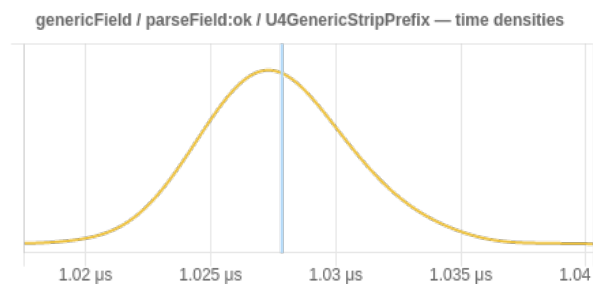
genericField / parseField:ok / U4Generic



	lower bound	estimate	upper bound
OLS regression	932 ns	932 ns	933 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	932 ns	933 ns	934 ns
Standard deviation	2.17 ns	3.89 ns	7.44 ns

Outlying measurements have no (0.467%) effect on estimated standard deviation.

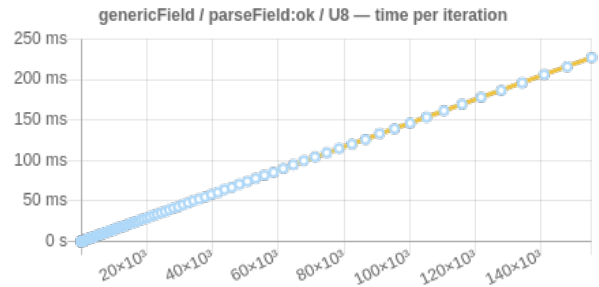
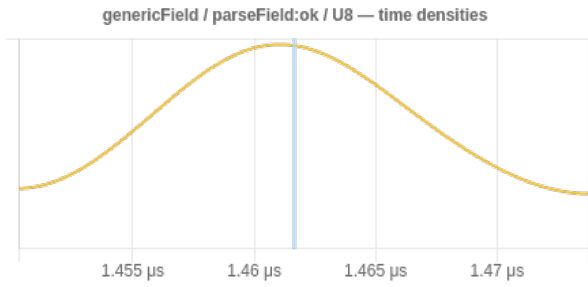
genericField / parseField:ok / U4GenericStripPrefix



	lower bound	estimate	upper bound
OLS regression	1.03 μs	1.03 μs	1.03 μs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	1.03 μs	1.03 μs	1.03 μs
Standard deviation	2.58 ns	3.35 ns	4.53 ns

Outlying measurements have no (0.472%) effect on estimated standard deviation.

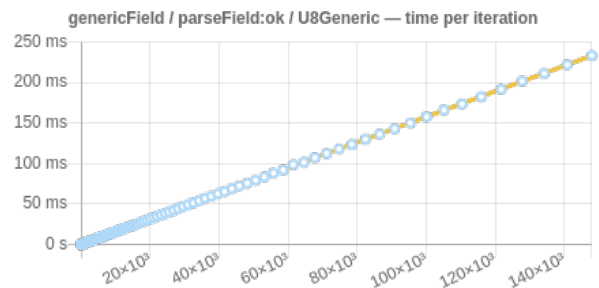
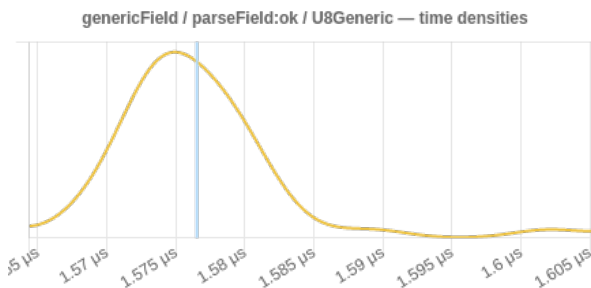
genericField / parseField:ok / U8



	lower bound	estimate	upper bound
OLS regression	1.46 μs	1.46 μs	1.46 μs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	1.46 μs	1.46 μs	1.46 μs
Standard deviation	4.05 ns	4.85 ns	5.84 ns

Outlying measurements have no (0.490%) effect on estimated standard deviation.

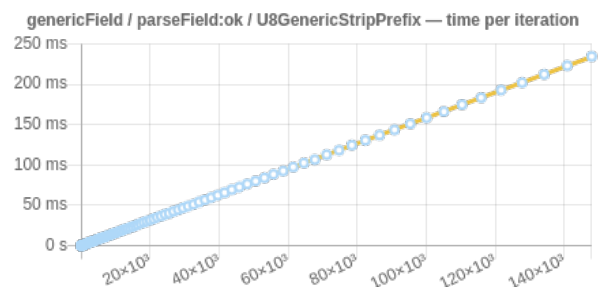
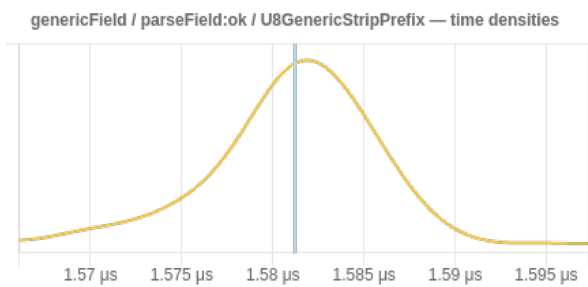
genericField / parseField:ok / U8Generic



	lower bound	estimate	upper bound
OLS regression	1.57 μs	1.58 μs	1.58 μs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	1.58 μs	1.58 μs	1.58 μs
Standard deviation	3.76 ns	5.64 ns	9.32 ns

Outlying measurements have no (0.493%) effect on estimated standard deviation.

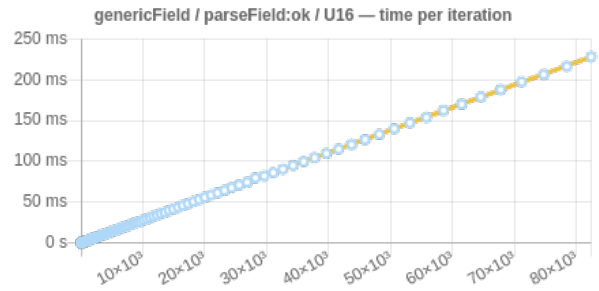
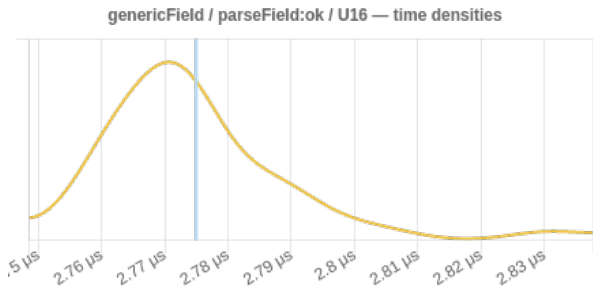
genericField / parseField:ok / U8GenericStripPrefix



	lower bound	estimate	upper bound
OLS regression	1.58 μs	1.58 μs	1.58 μs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	1.58 μs	1.58 μs	1.58 μs
Standard deviation	3.75 ns	4.83 ns	6.74 ns

Outlying measurements have no (0.493%) effect on estimated standard deviation.

genericField / parseField:ok / U16

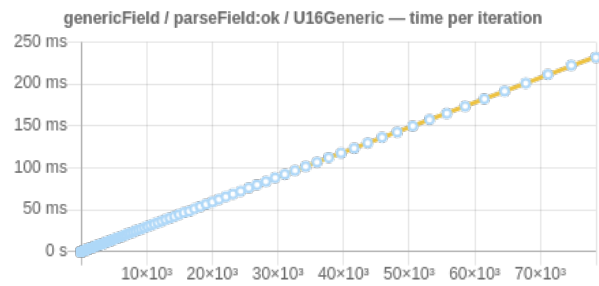
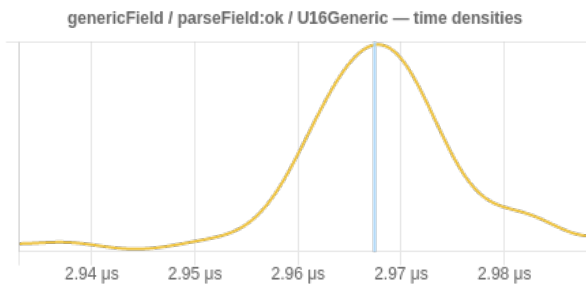


lower bound estimate upper bound

OLS regression	2.76 μs	2.77 μs	2.77 μs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	2.77 μs	2.77 μs	2.78 μs
Standard deviation	10.0 ns	13.9 ns	21.3 ns

Outlying measurements have no (0.524%) effect on estimated standard deviation.

genericField / parseField:ok / U16Generic

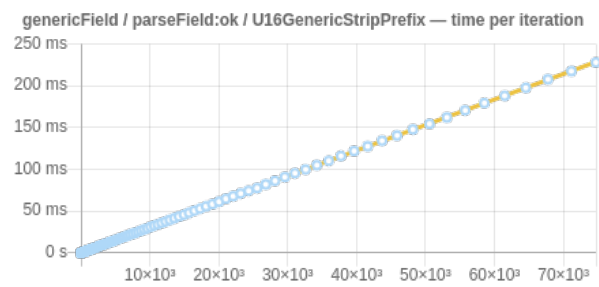
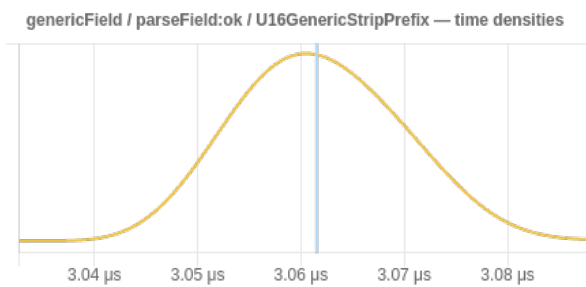


lower bound estimate upper bound

OLS regression	2.96 μs	2.96 μs	2.97 μs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	2.96 μs	2.97 μs	2.97 μs
Standard deviation	6.12 ns	7.97 ns	12.9 ns

Outlying measurements have no (0.526%) effect on estimated standard deviation.

genericField / parseField:ok / U16GenericStripPrefix

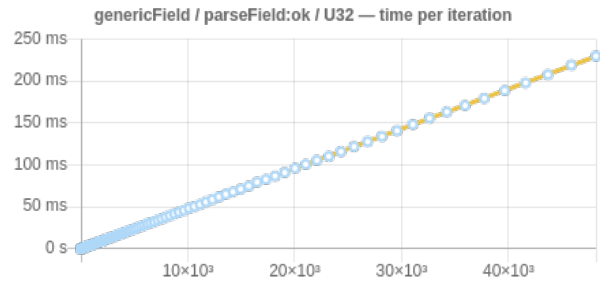
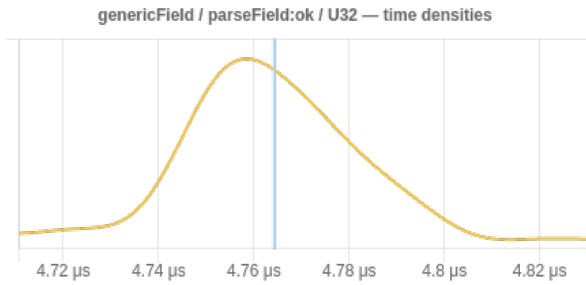


lower bound estimate upper bound

OLS regression	3.06 μs	3.06 μs	3.06 μs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	3.06 μs	3.06 μs	3.06 μs
Standard deviation	6.65 ns	8.37 ns	10.9 ns

Outlying measurements have no (0.529%) effect on estimated standard deviation.

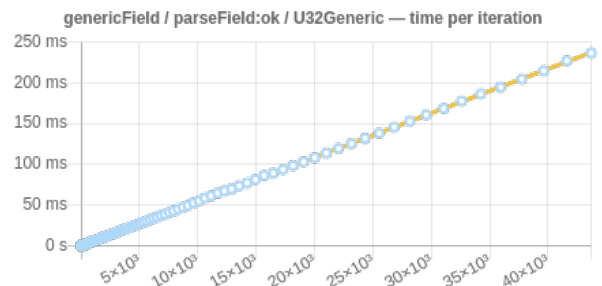
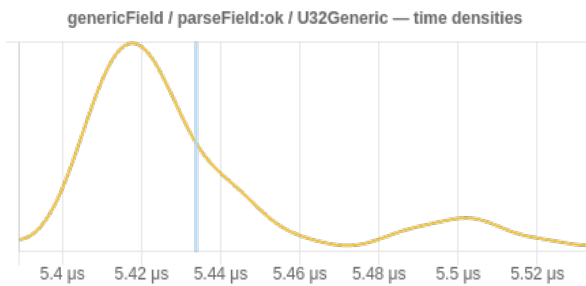
genericField / parseField:ok / U32



	lower bound	estimate	upper bound
OLS regression	4.76 μ s	4.76 μ s	4.77 μ s
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	4.76 μ s	4.76 μ s	4.77 μ s
Standard deviation	14.3 ns	18.4 ns	25.4 ns

Outlying measurements have no (0.556%) effect on estimated standard deviation.

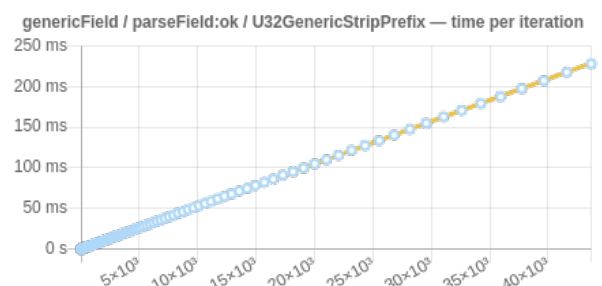
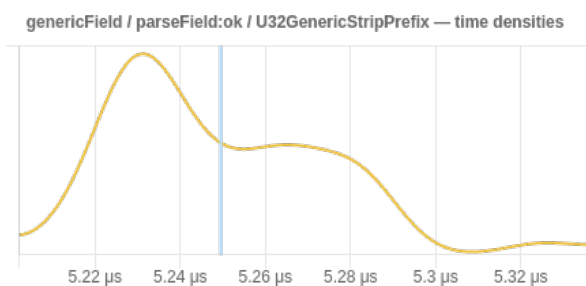
genericField / parseField:ok / U32Generic



	lower bound	estimate	upper bound
OLS regression	5.42 μ s	5.43 μ s	5.44 μ s
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	5.43 μ s	5.43 μ s	5.45 μ s
Standard deviation	22.8 ns	30.3 ns	39.8 ns

Outlying measurements have no (0.562%) effect on estimated standard deviation.

genericField / parseField:ok / U32GenericStripPrefix

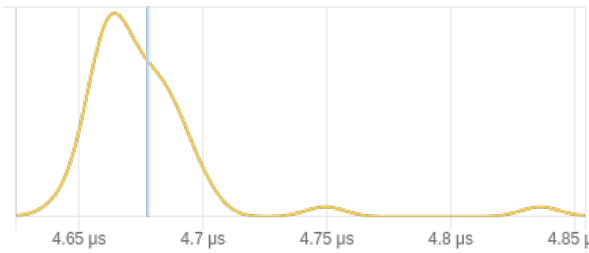


	lower bound	estimate	upper bound
OLS regression	5.23 μ s	5.23 μ s	5.24 μ s
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	5.24 μ s	5.25 μ s	5.26 μ s
Standard deviation	20.3 ns	24.3 ns	33.6 ns

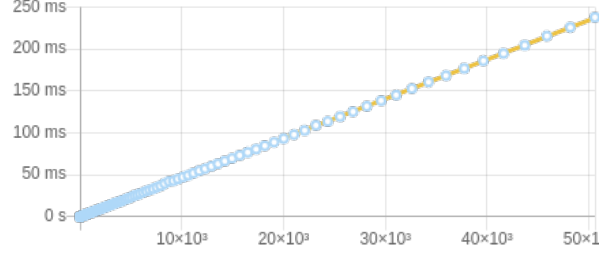
Outlying measurements have no (0.562%) effect on estimated standard deviation.

genericField / parseField:ok / EitherManual Int Char

genericField / parseField:ok / EitherManual Int Char — time densities



genericField / parseField:ok / EitherManual Int Char — time per iteration



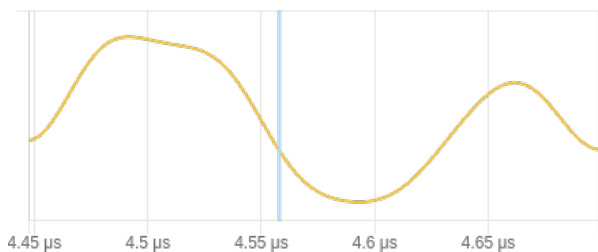
lower bound estimate upper bound

OLS regression	4.68 μ s	4.68 μ s	4.69 μ s
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	4.67 μ s	4.68 μ s	4.69 μ s
Standard deviation	16.5 ns	30.3 ns	55.7 ns

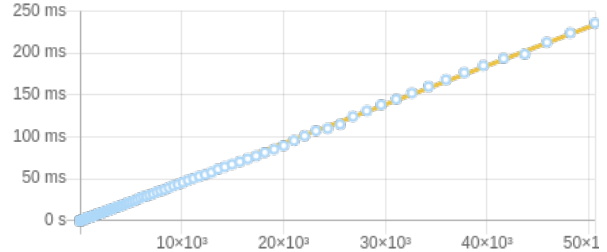
Outlying measurements have no (0.552%) effect on estimated standard deviation.

genericField / parseField:ok / EitherGeneric Int Char

genericField / parseField:ok / EitherGeneric Int Char — time densities



genericField / parseField:ok / EitherGeneric Int Char — time per iteration



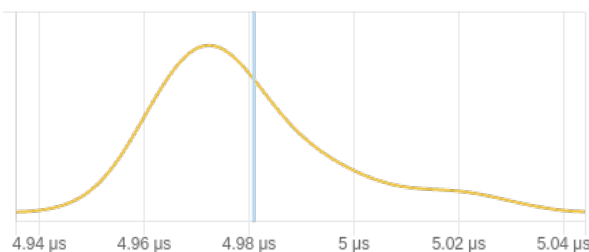
lower bound estimate upper bound

OLS regression	4.59 μ s	4.62 μ s	4.64 μ s
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	4.54 μ s	4.56 μ s	4.58 μ s
Standard deviation	66.3 ns	75.2 ns	83.5 ns

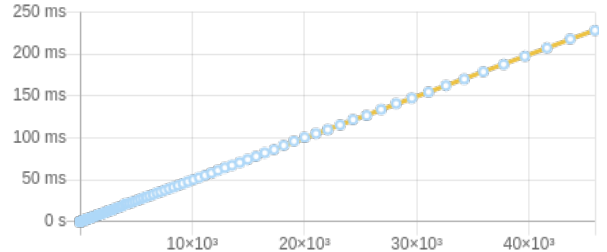
Outlying measurements have a moderate (15.3%) effect on estimated standard deviation.

genericField / parseField:ok / EitherManual (EitherManual Int Char) (EitherManual Int Char)

genericField / parseField:ok / EitherManual (EitherManual Int Char) (EitherManual Int Char) — time densities



genericField / parseField:ok / EitherManual (EitherManual Int Char) (EitherManual Int Char) — time per iteration



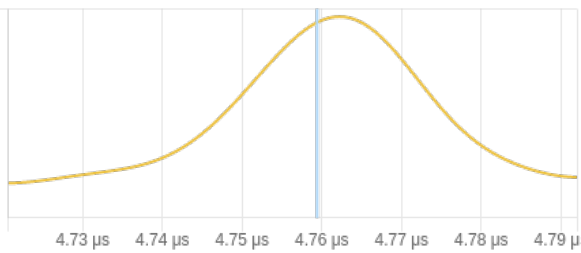
lower bound estimate upper bound

OLS regression	4.98 μ s	4.98 μ s	4.98 μ s
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	4.98 μ s	4.98 μ s	4.99 μ s
Standard deviation	15.2 ns	19.4 ns	24.7 ns

Outlying measurements have no (0.559%) effect on estimated standard deviation.

genericField / parseField:ok / EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)

genericField / parseField:ok / EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char) — time densities

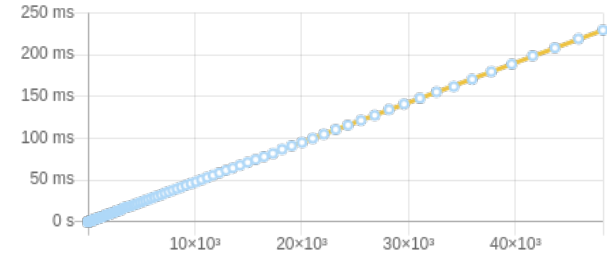


lower bound estimate upper bound

OLS regression	4.75 μ s	4.76 μ s	4.76 μ s
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	4.76 μ s	4.76 μ s	4.76 μ s
Standard deviation	11.4 ns	14.3 ns	17.8 ns

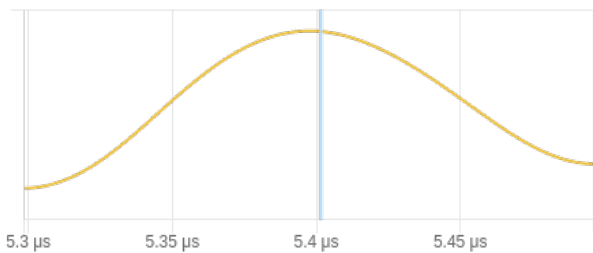
Outlying measurements have no (0.556%) effect on estimated standard deviation.

genericField / parseField:ok / EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char) — time per iteration



genericField / parseField:ok / EitherManual (EitherManual Int Char) (EitherManual Int Char) (EitherManual (EitherManual Int Char) (EitherManual Int Char))

genericField / parseField:ok / EitherManual (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual Int Char) (EitherManual Int Char)) — time densities

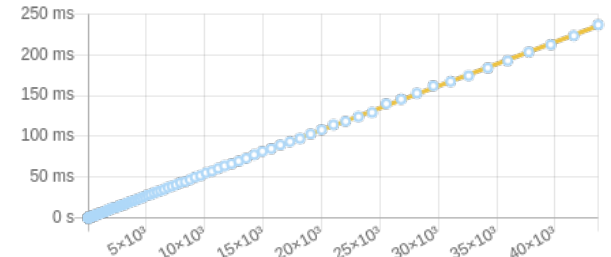


lower bound estimate upper bound

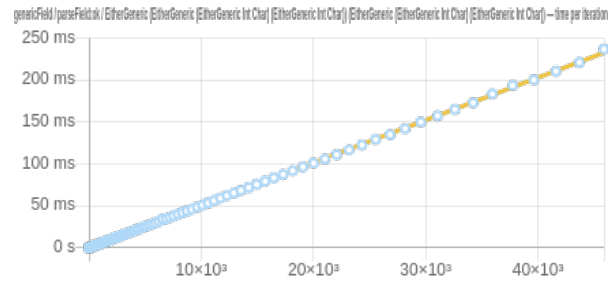
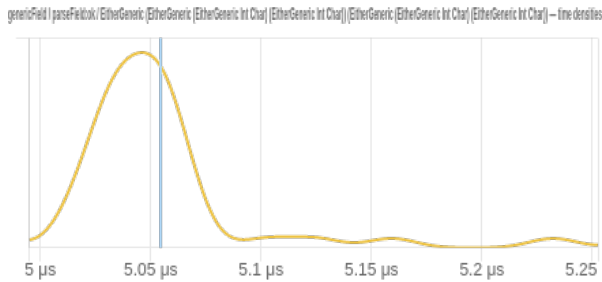
OLS regression	5.37 μ s	5.39 μ s	5.41 μ s
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	5.39 μ s	5.40 μ s	5.41 μ s
Standard deviation	33.7 ns	39.1 ns	47.7 ns

Outlying measurements have no (0.562%) effect on estimated standard deviation.

genericField / parseField:ok / EitherManual (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual Int Char) (EitherManual Int Char)) — time per iteration



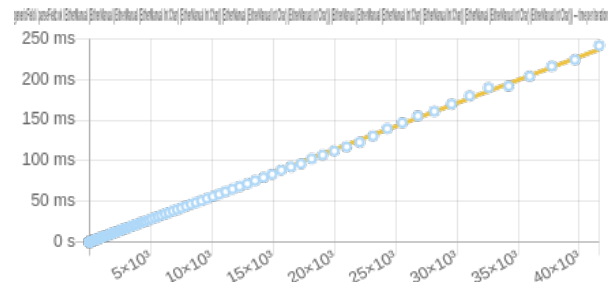
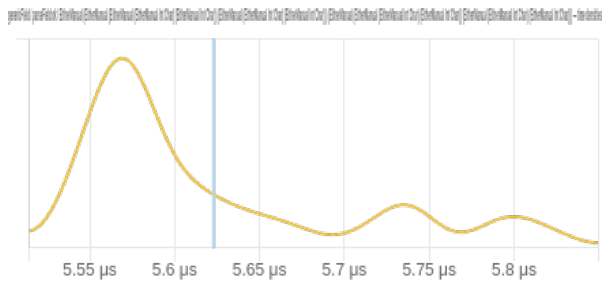
genericField / parseField:ok / EitherGeneric (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char))



	lower bound	estimate	upper bound
OLS regression	5.05 µs	5.07 µs	5.09 µs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	5.05 µs	5.05 µs	5.07 µs
Standard deviation	22.2 ns	38.7 ns	65.2 ns

Outlying measurements have no (0.559%) effect on estimated standard deviation.

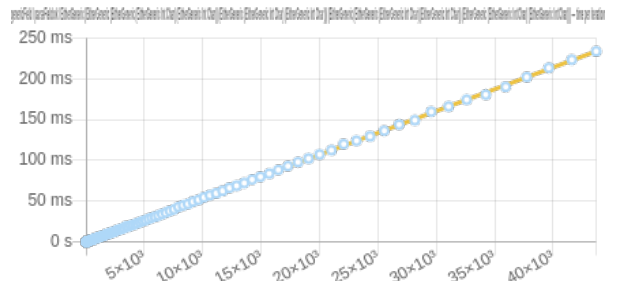
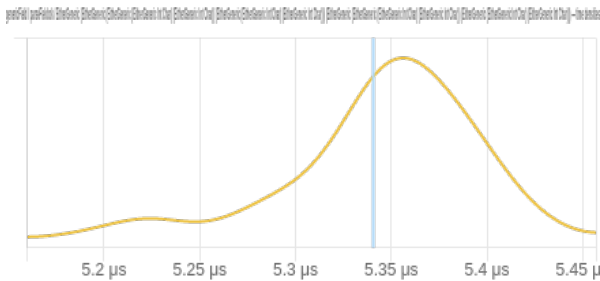
genericField / parseField:ok / EitherManual (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual Int Char) (EitherManual Int Char)))



	lower bound	estimate	upper bound
OLS regression	5.65 µs	5.70 µs	5.73 µs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	5.60 µs	5.62 µs	5.65 µs
Standard deviation	66.0 ns	81.6 ns	99.7 ns

Outlying measurements have a moderate (11.8%) effect on estimated standard deviation.

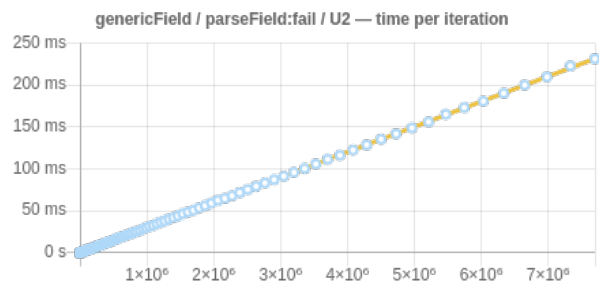
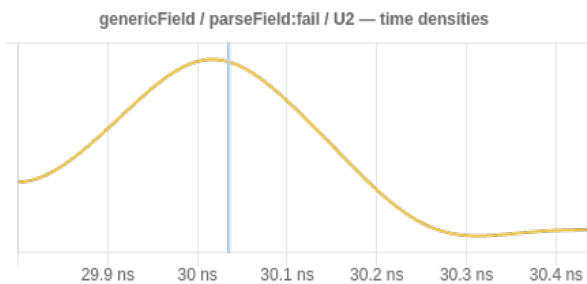
genericField / parseField:ok / EitherGeneric (EitherGeneric (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char))) (EitherGeneric (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)))



	lower bound	estimate	upper bound
OLS regression	5.33 μs	5.35 μs	5.37 μs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	5.32 μs	5.34 μs	5.35 μs
Standard deviation	41.2 ns	53.9 ns	70.7 ns

Outlying measurements have a slight (6.38%) effect on estimated standard deviation.

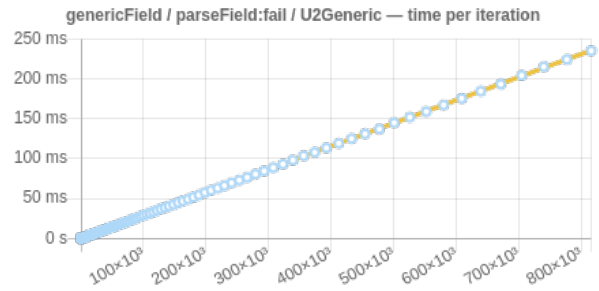
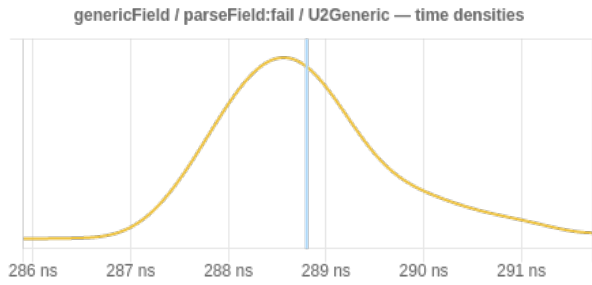
genericField / parseField:fail / U2



	lower bound	estimate	upper bound
OLS regression	30.0 ns	30.0 ns	30.1 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	30.0 ns	30.0 ns	30.1 ns
Standard deviation	92.7 ps	119 ps	159 ps

Outlying measurements have no (0.352%) effect on estimated standard deviation.

genericField / parseField:fail / U2Generic

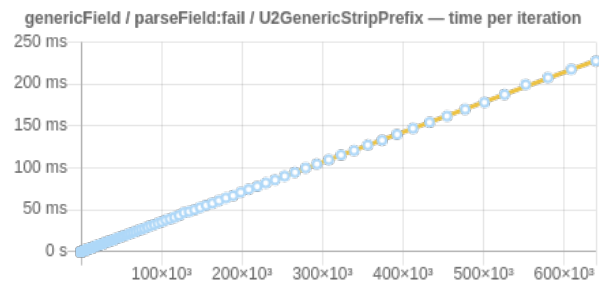
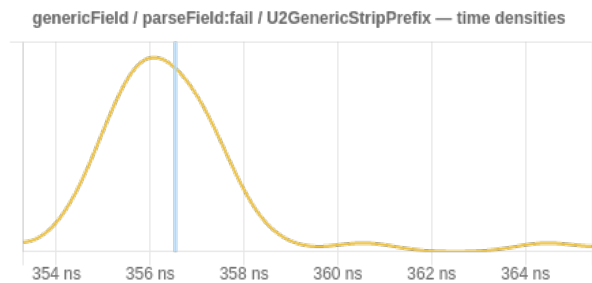


lower bound estimate upper bound

OLS regression	288 ns	289 ns	289 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	289 ns	289 ns	289 ns
Standard deviation	773 ps	958 ps	1.27 ns

Outlying measurements have no (0.420%) effect on estimated standard deviation.

genericField / parseField:fail / U2GenericStripPrefix

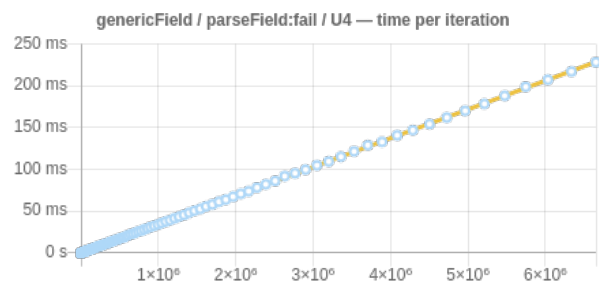
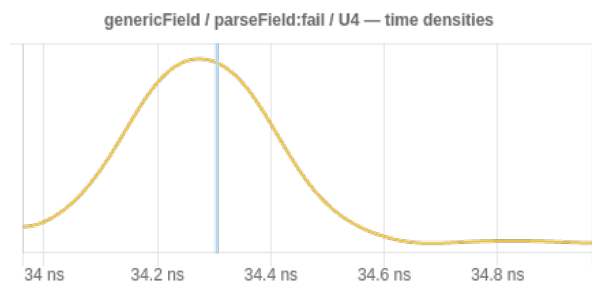


lower bound estimate upper bound

OLS regression	356 ns	357 ns	357 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	356 ns	357 ns	357 ns
Standard deviation	981 ps	1.68 ns	2.87 ns

Outlying measurements have no (0.429%) effect on estimated standard deviation.

genericField / parseField:fail / U4

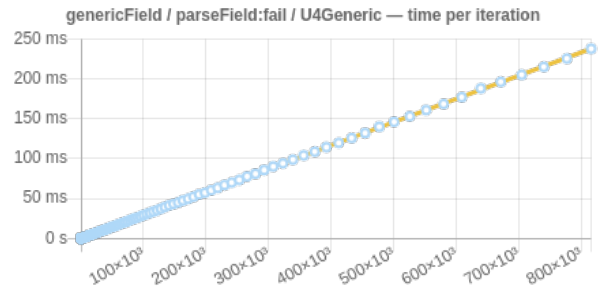
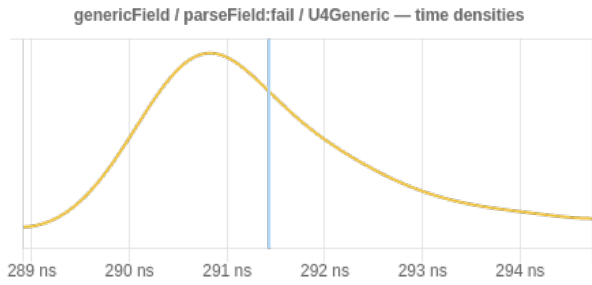


lower bound estimate upper bound

OLS regression	34.3 ns	34.3 ns	34.4 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	34.3 ns	34.3 ns	34.4 ns
Standard deviation	115 ps	162 ps	243 ps

Outlying measurements have no (0.356%) effect on estimated standard deviation.

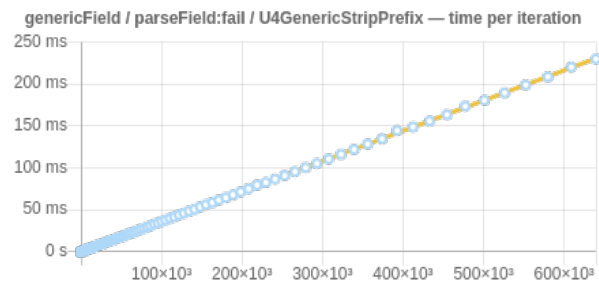
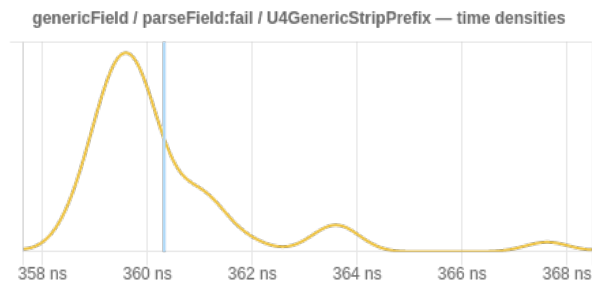
genericField / parseField:fail / U4Generic



	lower bound	estimate	upper bound
OLS regression	291 ns	291 ns	292 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	291 ns	291 ns	292 ns
Standard deviation	978 ps	1.17 ns	1.46 ns

Outlying measurements have no (0.420%) effect on estimated standard deviation.

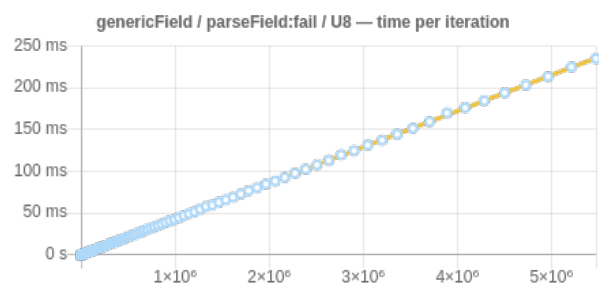
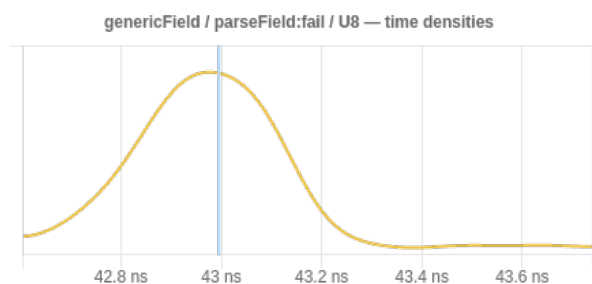
genericField / parseField:fail / U4GenericStripPrefix



	lower bound	estimate	upper bound
OLS regression	360 ns	360 ns	361 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	360 ns	360 ns	361 ns
Standard deviation	1.05 ns	1.66 ns	2.94 ns

Outlying measurements have no (0.429%) effect on estimated standard deviation.

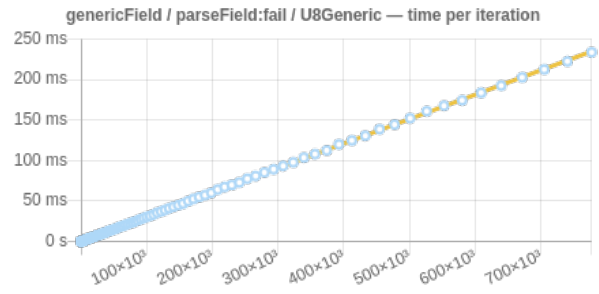
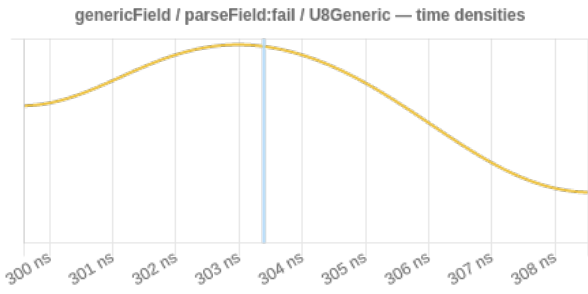
genericField / parseField:fail / U8



	lower bound	estimate	upper bound
OLS regression	43.0 ns	43.0 ns	43.1 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	43.0 ns	43.0 ns	43.1 ns
Standard deviation	120 ps	174 ps	254 ps

Outlying measurements have no (0.361%) effect on estimated standard deviation.

genericField / parseField:fail / U8Generic

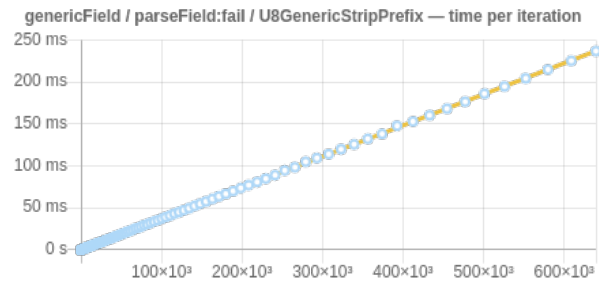
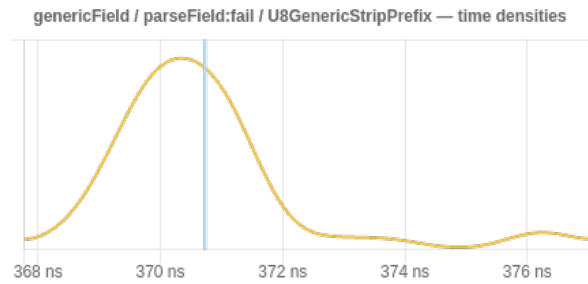


lower bound estimate upper bound

OLS regression	302 ns	302 ns	303 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	303 ns	303 ns	304 ns
Standard deviation	1.64 ns	1.92 ns	2.32 ns

Outlying measurements have no (0.422%) effect on estimated standard deviation.

genericField / parseField:fail / U8GenericStripPrefix

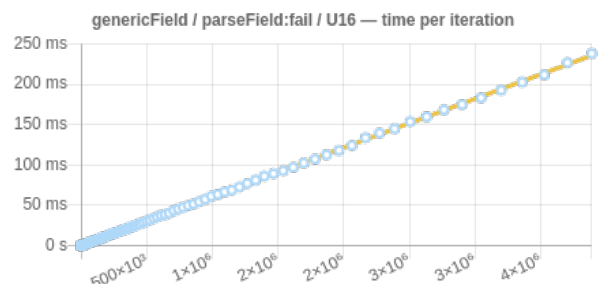
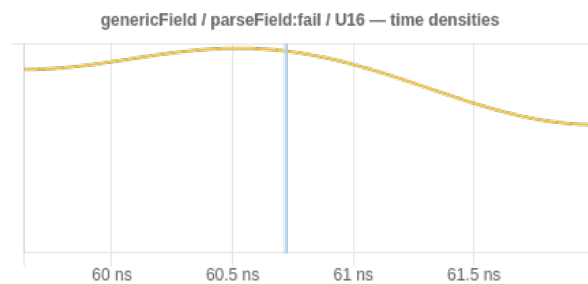


lower bound estimate upper bound

OLS regression	370 ns	371 ns	371 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	370 ns	371 ns	371 ns
Standard deviation	988 ps	1.56 ns	2.28 ns

Outlying measurements have no (0.429%) effect on estimated standard deviation.

genericField / parseField:fail / U16

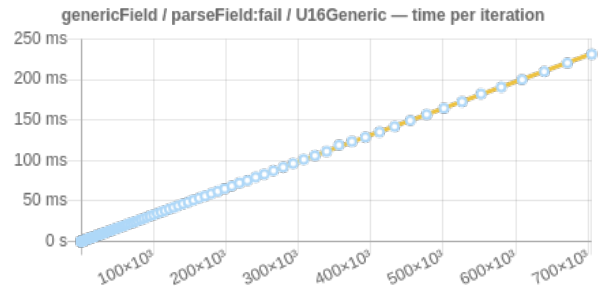
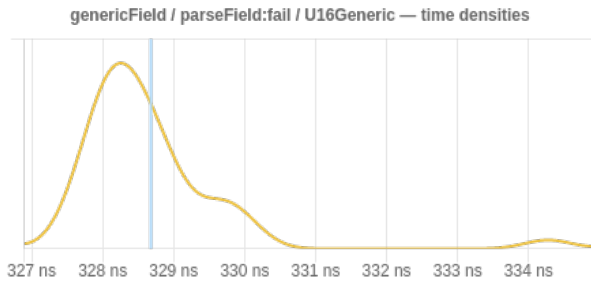


lower bound estimate upper bound

OLS regression	60.4 ns	60.6 ns	60.8 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	60.6 ns	60.7 ns	60.9 ns
Standard deviation	478 ps	560 ps	648 ps

Outlying measurements have a slight (7.72%) effect on estimated standard deviation.

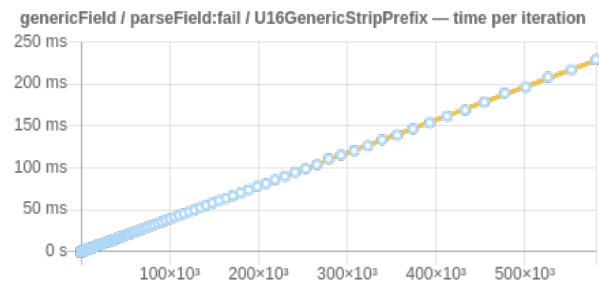
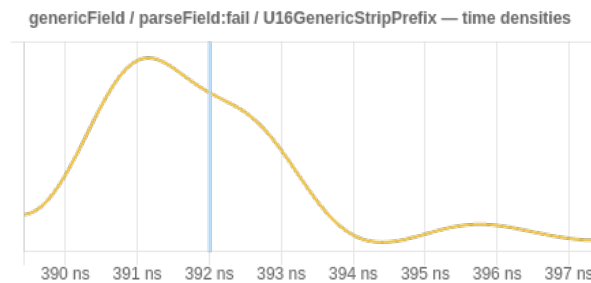
genericField / parseField:fail / U16Generic



	lower bound	estimate	upper bound
OLS regression	328 ns	329 ns	329 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	328 ns	329 ns	329 ns
Standard deviation	597 ps	1.08 ns	2.10 ns

Outlying measurements have no (0.426%) effect on estimated standard deviation.

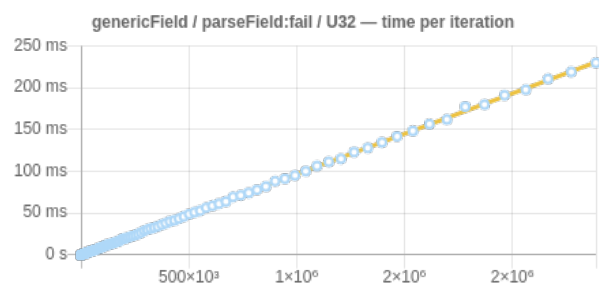
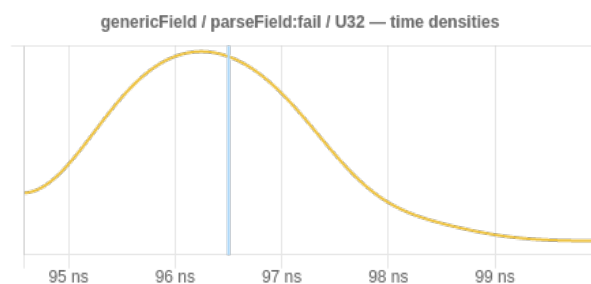
genericField / parseField:fail / U16GenericStripPrefix



	lower bound	estimate	upper bound
OLS regression	392 ns	393 ns	394 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	392 ns	392 ns	393 ns
Standard deviation	1.10 ns	1.52 ns	2.04 ns

Outlying measurements have no (0.433%) effect on estimated standard deviation.

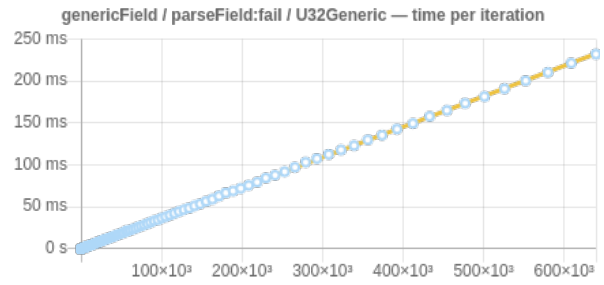
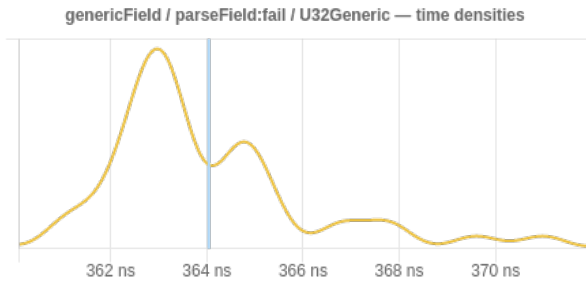
genericField / parseField:fail / U32



	lower bound	estimate	upper bound
OLS regression	96.2 ns	96.6 ns	97.0 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	96.3 ns	96.5 ns	96.8 ns
Standard deviation	774 ps	953 ps	1.28 ns

Outlying measurements have a slight (8.39%) effect on estimated standard deviation.

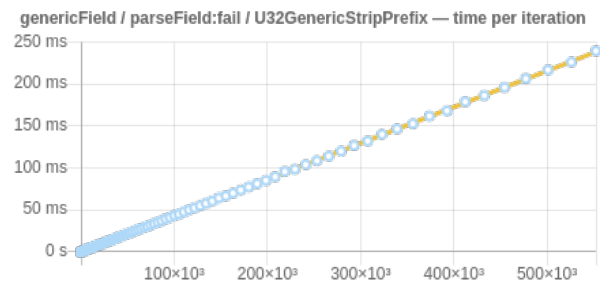
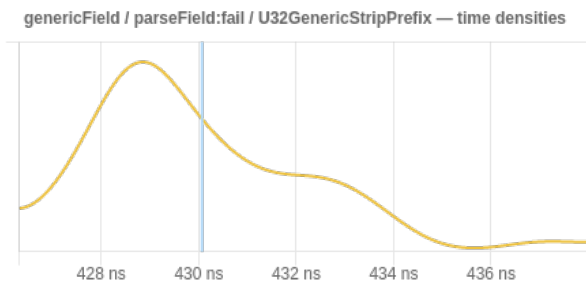
genericField / parseField:fail / U32Generic



	lower bound	estimate	upper bound
OLS regression	363 ns	363 ns	364 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	363 ns	364 ns	365 ns
Standard deviation	1.62 ns	2.12 ns	2.92 ns

Outlying measurements have no (0.429%) effect on estimated standard deviation.

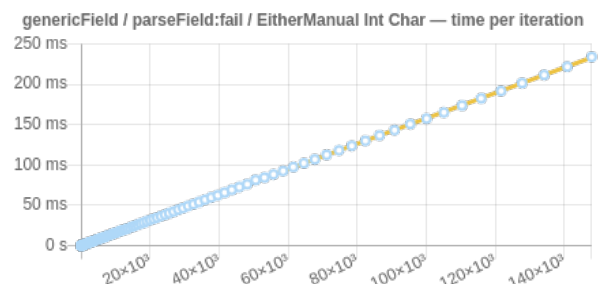
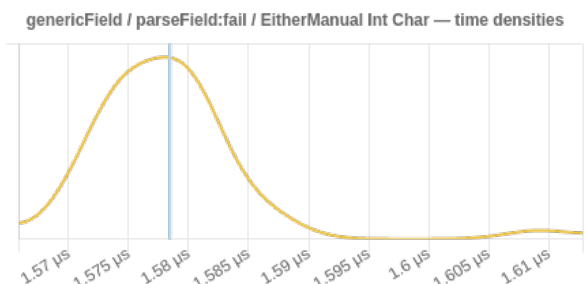
genericField / parseField:fail / U32GenericStripPrefix



	lower bound	estimate	upper bound
OLS regression	430 ns	431 ns	432 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	429 ns	430 ns	431 ns
Standard deviation	1.73 ns	2.11 ns	2.87 ns

Outlying measurements have no (0.435%) effect on estimated standard deviation.

genericField / parseField:fail / EitherManual Int Char

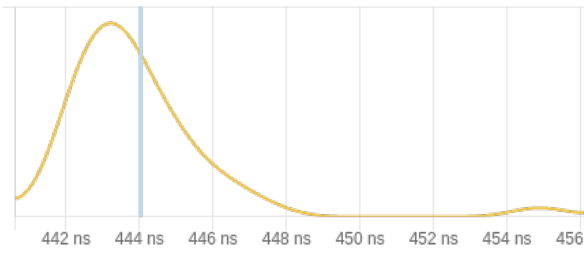


	lower bound	estimate	upper bound
OLS regression	1.57 µs	1.58 µs	1.58 µs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	1.58 µs	1.58 µs	1.58 µs
Standard deviation	3.95 ns	6.30 ns	11.6 ns

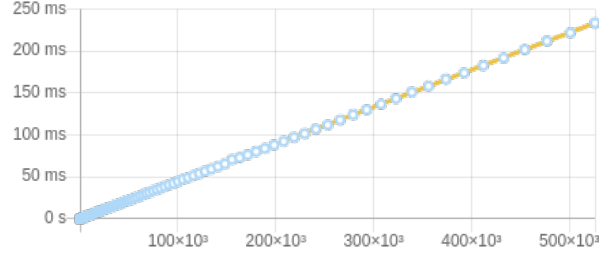
Outlying measurements have no (0.493%) effect on estimated standard deviation.

genericField / parseField:fail / EitherGeneric Int Char

genericField / parseField:fail / EitherGeneric Int Char — time densities



genericField / parseField:fail / EitherGeneric Int Char — time per iteration



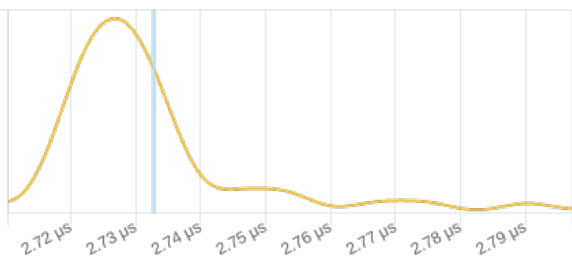
lower bound estimate upper bound

OLS regression	443 ns	444 ns	444 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	444 ns	444 ns	445 ns
Standard deviation	1.21 ns	2.14 ns	3.83 ns

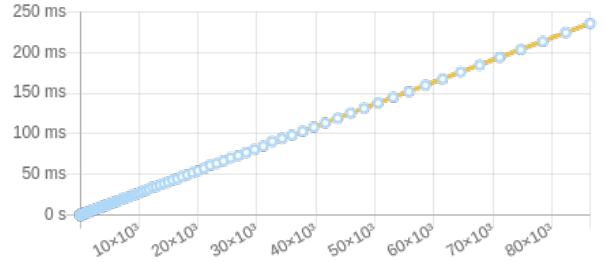
Outlying measurements have no (0.437%) effect on estimated standard deviation.

genericField / parseField:fail / EitherManual (EitherManual Int Char) (EitherManual Int Char)

genericField / parseField:fail / EitherManual (EitherManual Int Char) (EitherManual Int Char) — time densities



genericField / parseField:fail / EitherManual (EitherManual Int Char) (EitherManual Int Char) — time per iteration



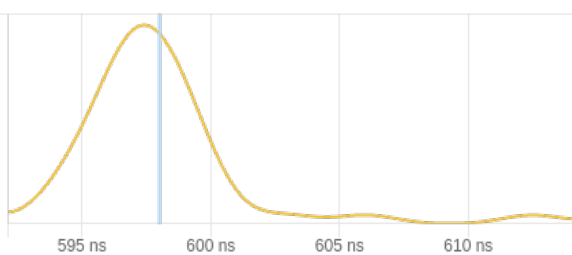
lower bound estimate upper bound

OLS regression	2.72 µs	2.73 µs	2.73 µs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	2.73 µs	2.73 µs	2.74 µs
Standard deviation	10.1 ns	15.0 ns	22.0 ns

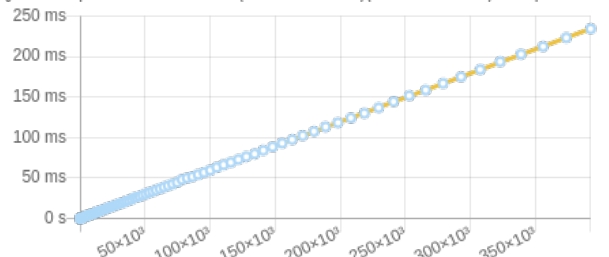
Outlying measurements have no (0.521%) effect on estimated standard deviation.

genericField / parseField:fail / EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)

genericField / parseField:fail / EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char) — time densities



genericField / parseField:fail / EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char) — time per iteration



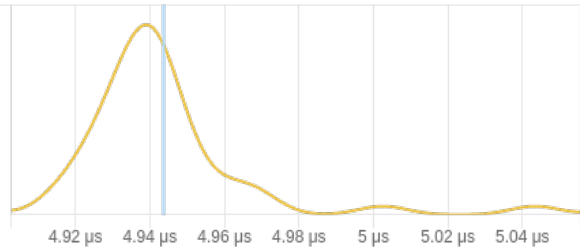
lower bound estimate upper bound

OLS regression	597 ns	597 ns	598 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	597 ns	598 ns	599 ns
Standard deviation	1.89 ns	3.11 ns	5.09 ns

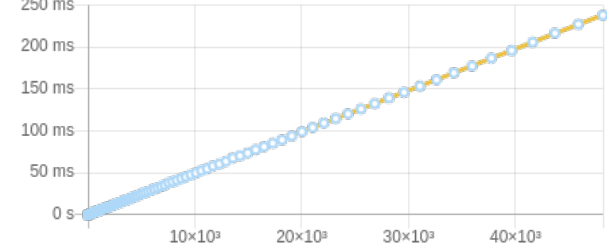
Outlying measurements have no (0.448%) effect on estimated standard deviation.

genericField / parseField:fail / EitherManual (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual Int Char) (EitherManual Int Char))

genericField / parseField:fail / EitherManual (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual Int Char) (EitherManual Int Char)) - time densities



genericField / parseField:fail / EitherManual (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual Int Char) (EitherManual Int Char)) - time per iteration



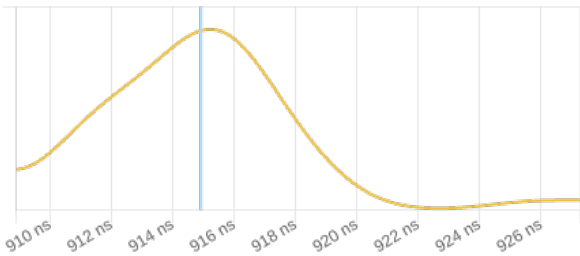
lower bound estimate upper bound

OLS regression	4.94 µs	4.94 µs	4.94 µs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	4.94 µs	4.94 µs	4.95 µs
Standard deviation	13.3 ns	21.7 ns	38.1 ns

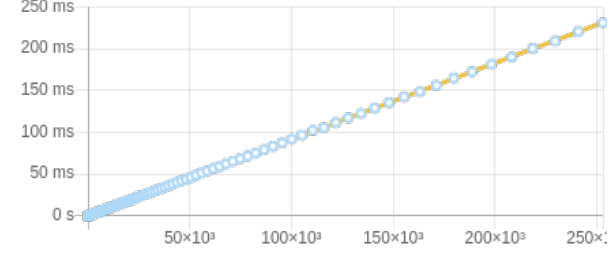
Outlying measurements have no (0.556%) effect on estimated standard deviation.

genericField / parseField:fail / EitherGeneric (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char))

genericField / parseField:fail / EitherGeneric (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) - time densities



genericField / parseField:fail / EitherGeneric (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) - time per iteration

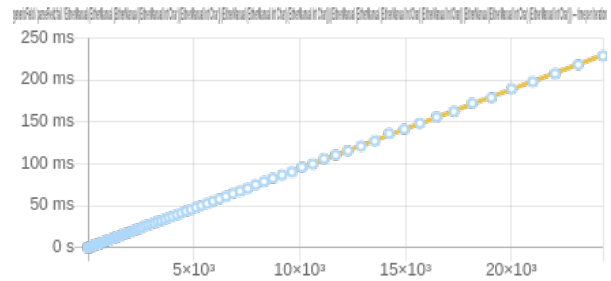
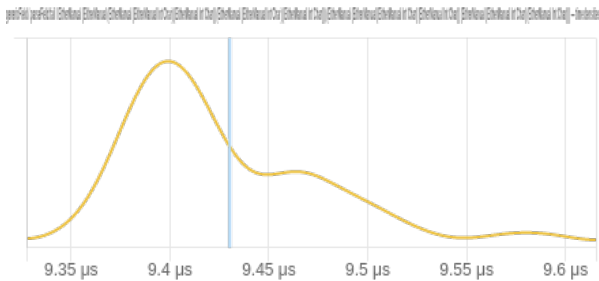


lower bound estimate upper bound

OLS regression	914 ns	915 ns	916 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	914 ns	915 ns	916 ns
Standard deviation	2.14 ns	2.79 ns	4.14 ns

Outlying measurements have no (0.467%) effect on estimated standard deviation.

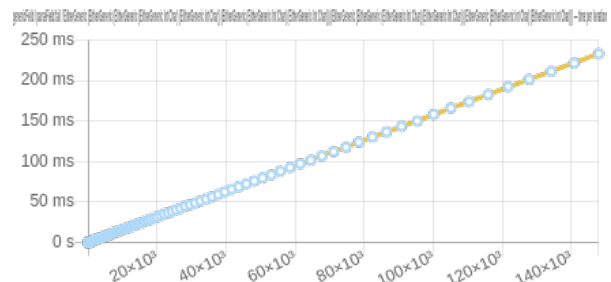
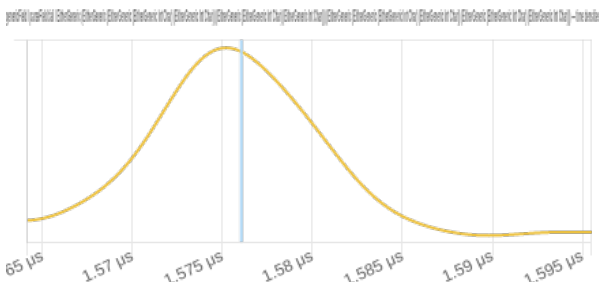
genericField / parseField:fail / EitherManual (EitherManual (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual Int Char) (EitherManual Int Char))) (EitherManual (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual Int Char) (EitherManual Int Char))) (EitherManual (EitherManual Int Char) (EitherManual Int Char)))



	lower bound	estimate	upper bound
OLS regression	9.41 μs	9.43 μs	9.45 μs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	9.42 μs	9.43 μs	9.45 μs
Standard deviation	41.4 ns	52.9 ns	72.4 ns

Outlying measurements have no (0.602%) effect on estimated standard deviation.

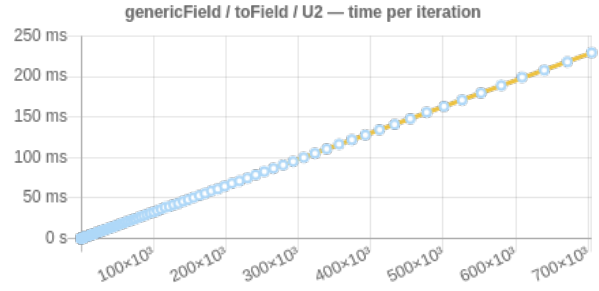
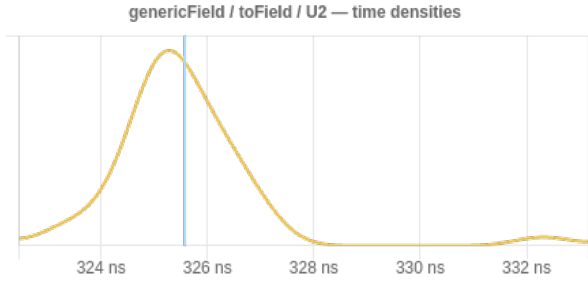
genericField / parseField:fail / EitherGeneric (EitherGeneric (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char))) (EitherGeneric (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char))) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)))



	lower bound	estimate	upper bound
OLS regression	1.57 μs	1.58 μs	1.58 μs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	1.57 μs	1.58 μs	1.58 μs
Standard deviation	3.70 ns	4.78 ns	7.31 ns

Outlying measurements have no (0.493%) effect on estimated standard deviation.

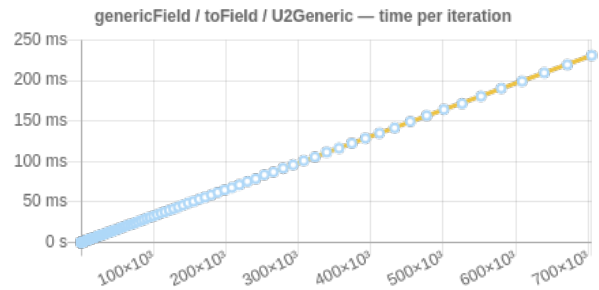
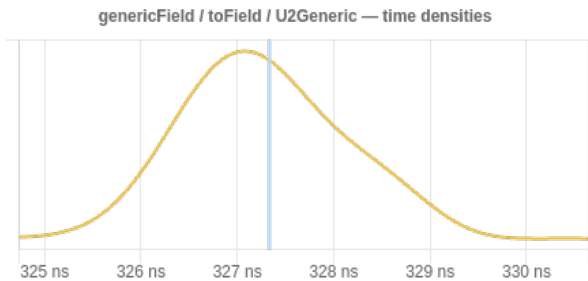
genericField / toField / U2



	lower bound	estimate	upper bound
OLS regression	325 ns	325 ns	326 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	325 ns	326 ns	326 ns
Standard deviation	802 ps	1.35 ns	2.63 ns

Outlying measurements have no (0.426%) effect on estimated standard deviation.

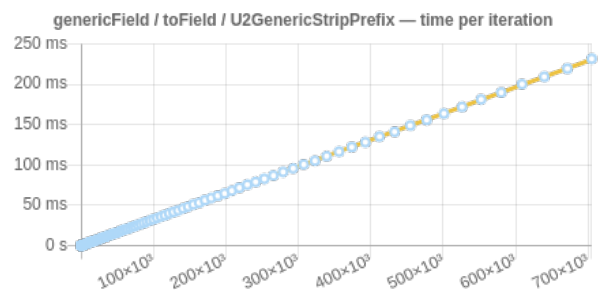
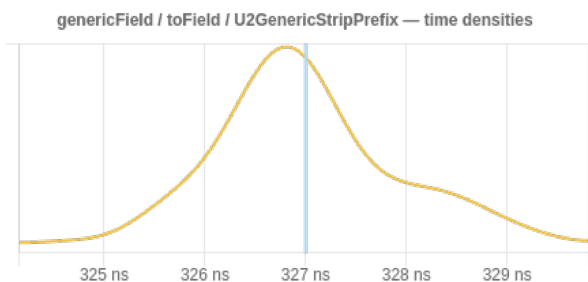
genericField / toField / U2Generic



	lower bound	estimate	upper bound
OLS regression	327 ns	327 ns	328 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	327 ns	327 ns	328 ns
Standard deviation	730 ps	919 ps	1.20 ns

Outlying measurements have no (0.426%) effect on estimated standard deviation.

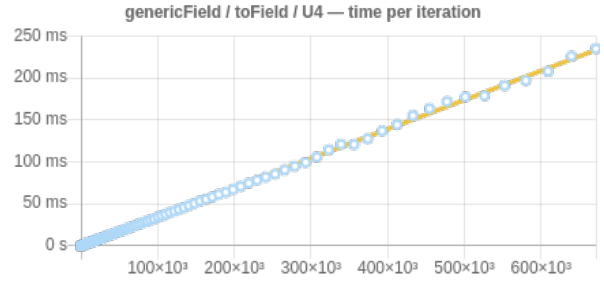
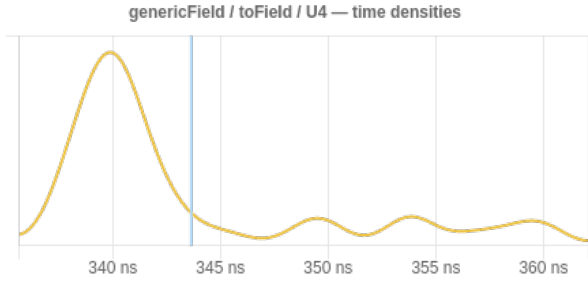
genericField / toField / U2GenericStripPrefix



	lower bound	estimate	upper bound
OLS regression	327 ns	327 ns	328 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	327 ns	327 ns	327 ns
Standard deviation	769 ps	956 ps	1.21 ns

Outlying measurements have no (0.426%) effect on estimated standard deviation.

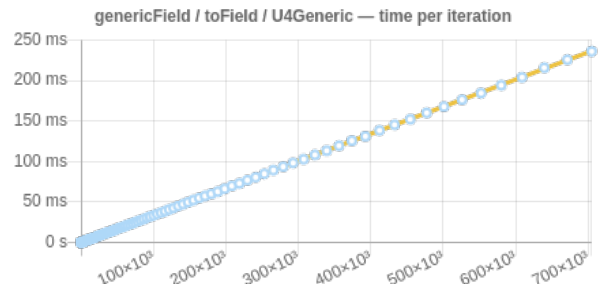
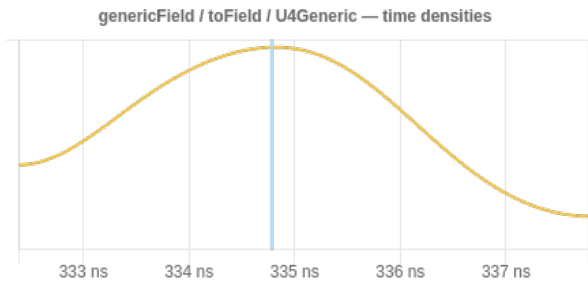
genericField / toField / U4



	lower bound	estimate	upper bound
OLS regression	344 ns	347 ns	351 ns
R ² goodness-of-fit	0.999	0.999	1.00
Mean execution time	342 ns	344 ns	346 ns
Standard deviation	5.00 ns	6.55 ns	8.09 ns

Outlying measurements have a moderate (23.4%) effect on estimated standard deviation.

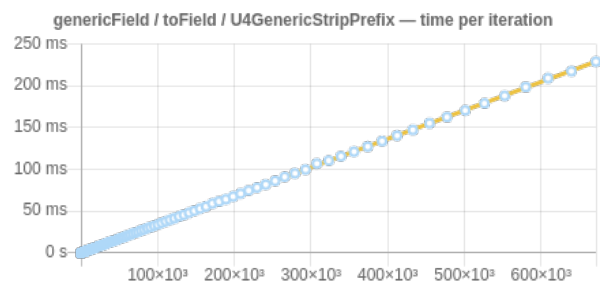
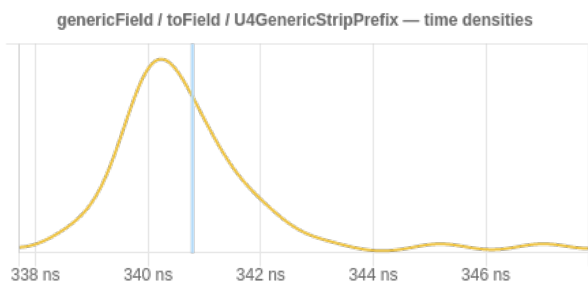
genericField / toField / U4Generic



	lower bound	estimate	upper bound
OLS regression	335 ns	335 ns	336 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	334 ns	335 ns	335 ns
Standard deviation	914 ps	1.08 ns	1.32 ns

Outlying measurements have no (0.426%) effect on estimated standard deviation.

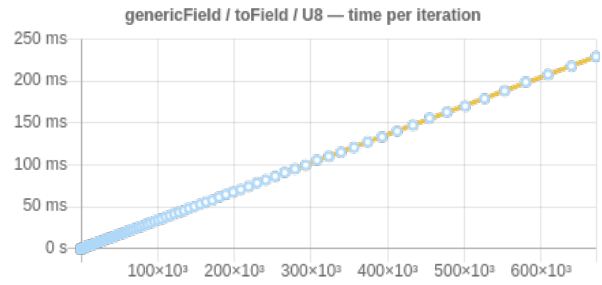
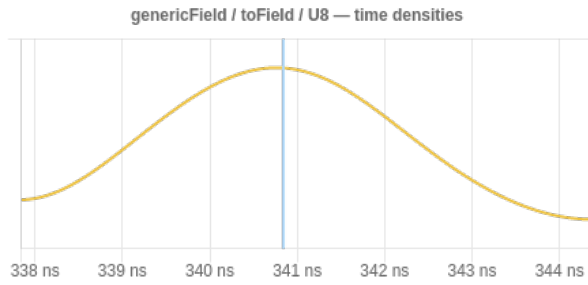
genericField / toField / U4GenericStripPrefix



	lower bound	estimate	upper bound
OLS regression	340 ns	341 ns	341 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	340 ns	341 ns	341 ns
Standard deviation	1.01 ns	1.51 ns	2.47 ns

Outlying measurements have no (0.427%) effect on estimated standard deviation.

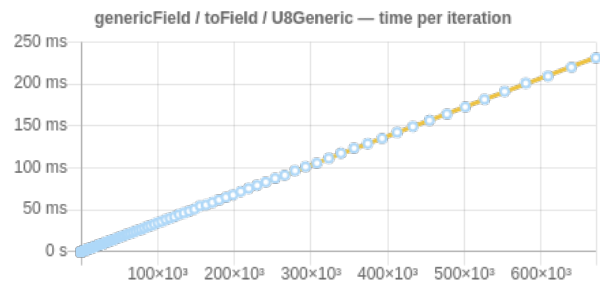
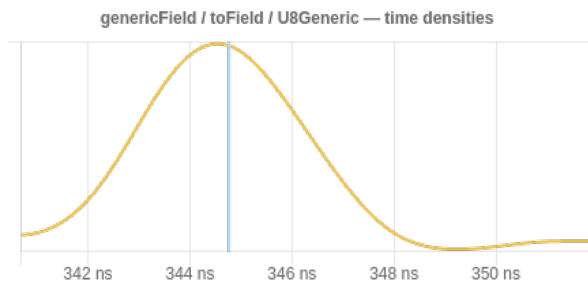
genericField / toField / U8



	lower bound	estimate	upper bound
OLS regression	340 ns	341 ns	341 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	340 ns	341 ns	341 ns
Standard deviation	1.03 ns	1.26 ns	1.54 ns

Outlying measurements have no (0.427%) effect on estimated standard deviation.

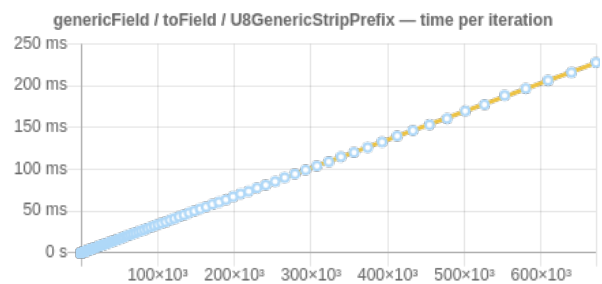
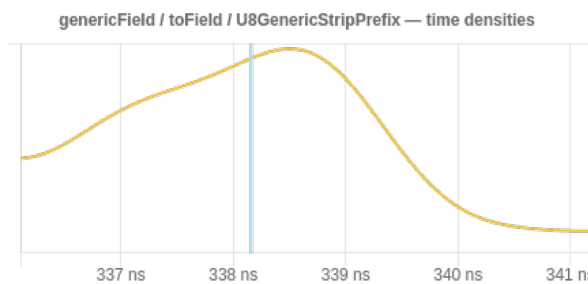
genericField / toField / U8Generic



	lower bound	estimate	upper bound
OLS regression	344 ns	345 ns	345 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	344 ns	345 ns	345 ns
Standard deviation	1.15 ns	1.58 ns	2.39 ns

Outlying measurements have no (0.427%) effect on estimated standard deviation.

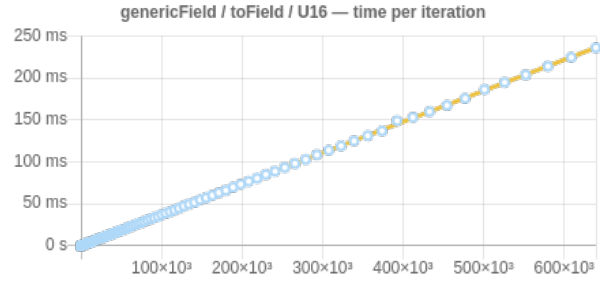
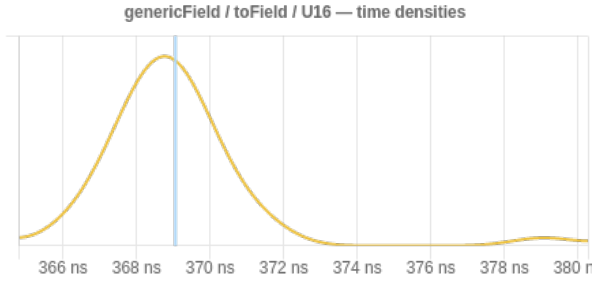
genericField / toField / U8GenericStripPrefix



	lower bound	estimate	upper bound
OLS regression	338 ns	338 ns	339 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	338 ns	338 ns	339 ns
Standard deviation	826 ps	993 ps	1.24 ns

Outlying measurements have no (0.427%) effect on estimated standard deviation.

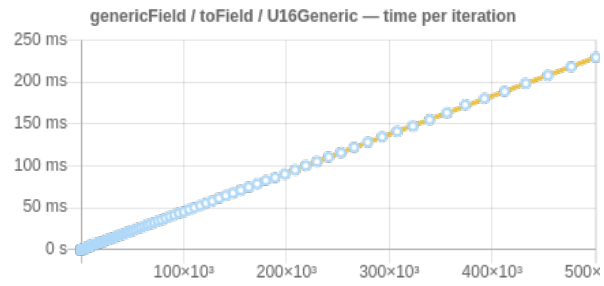
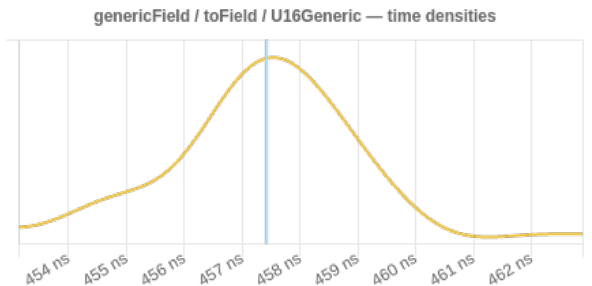
genericField / toField / U16



	lower bound	estimate	upper bound
OLS regression	369 ns	369 ns	370 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	369 ns	369 ns	370 ns
Standard deviation	1.17 ns	1.97 ns	3.57 ns

Outlying measurements have no (0.429%) effect on estimated standard deviation.

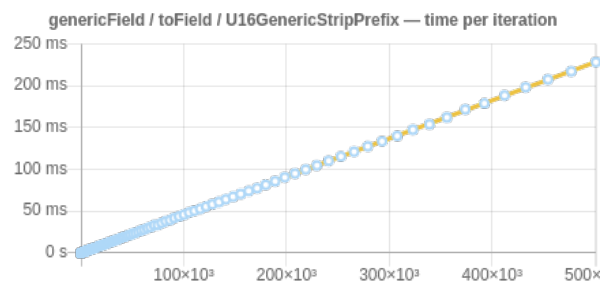
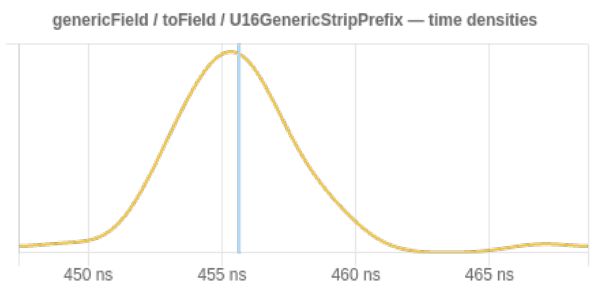
genericField / toField / U16Generic



	lower bound	estimate	upper bound
OLS regression	457 ns	458 ns	458 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	457 ns	457 ns	458 ns
Standard deviation	1.21 ns	1.52 ns	2.04 ns

Outlying measurements have no (0.439%) effect on estimated standard deviation.

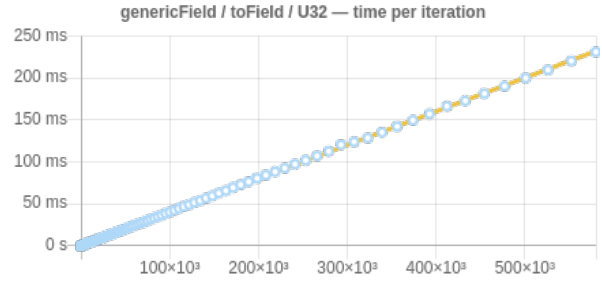
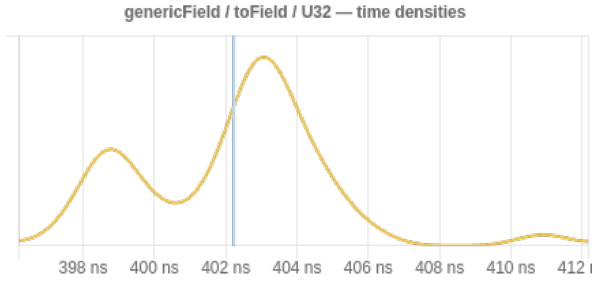
genericField / toField / U16GenericStripPrefix



	lower bound	estimate	upper bound
OLS regression	455 ns	456 ns	456 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	455 ns	456 ns	457 ns
Standard deviation	1.83 ns	2.69 ns	4.42 ns

Outlying measurements have no (0.439%) effect on estimated standard deviation.

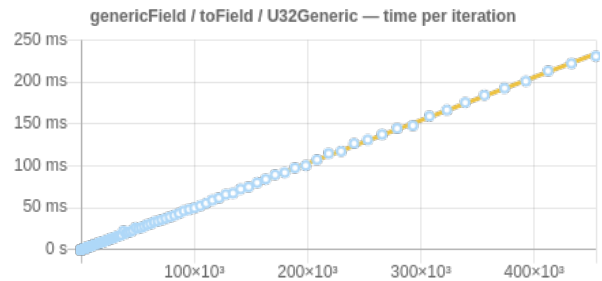
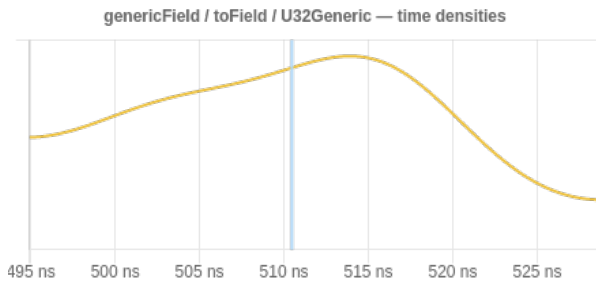
genericField / toField / U32



	lower bound	estimate	upper bound
OLS regression	399 ns	400 ns	402 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	401 ns	402 ns	403 ns
Standard deviation	2.07 ns	2.60 ns	3.52 ns

Outlying measurements have no (0.433%) effect on estimated standard deviation.

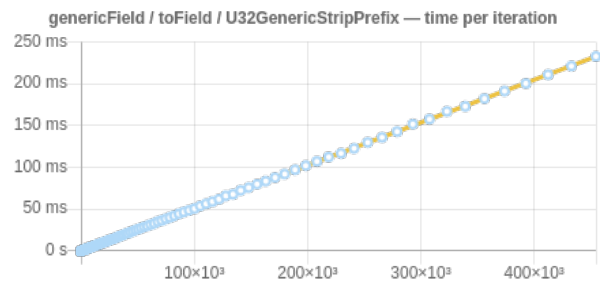
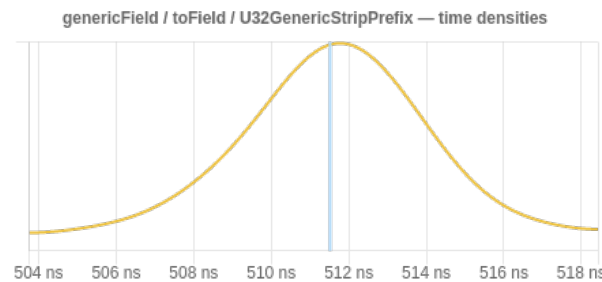
genericField / toField / U32Generic



	lower bound	estimate	upper bound
OLS regression	512 ns	514 ns	516 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	508 ns	510 ns	513 ns
Standard deviation	6.59 ns	7.60 ns	9.06 ns

Outlying measurements have a moderate (15.2%) effect on estimated standard deviation.

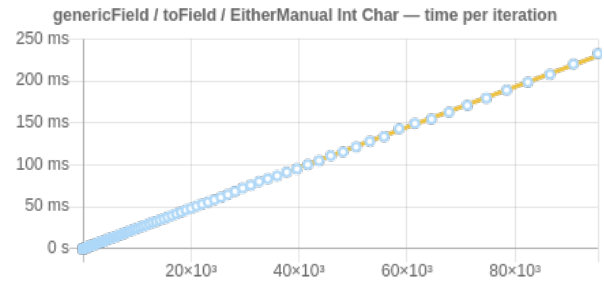
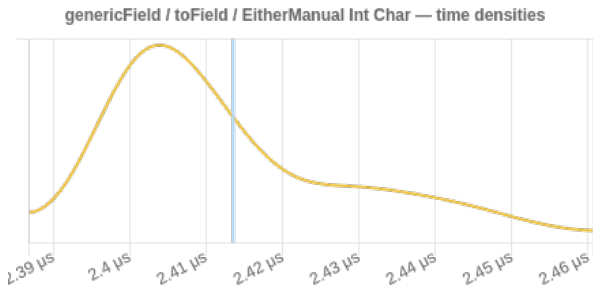
genericField / toField / U32GenericStripPrefix



	lower bound	estimate	upper bound
OLS regression	511 ns	512 ns	513 ns
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	511 ns	512 ns	512 ns
Standard deviation	1.99 ns	2.50 ns	3.25 ns

Outlying measurements have no (0.442%) effect on estimated standard deviation.

genericField / toField / EitherManual Int Char

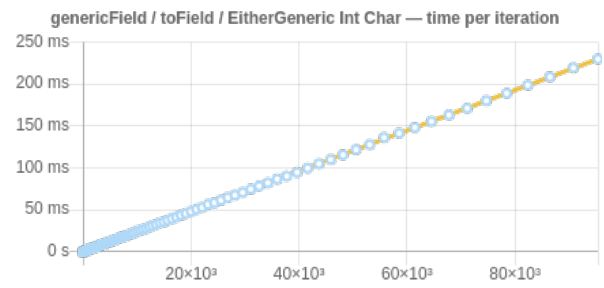
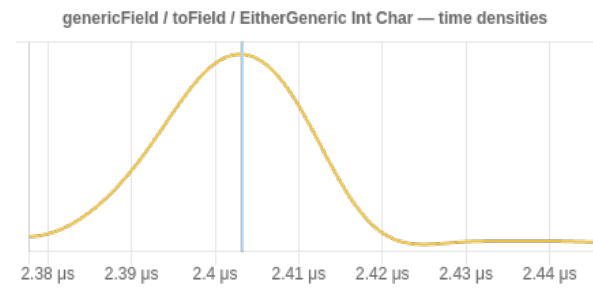


lower bound estimate upper bound

OLS regression	2.41 μ s	2.41 μ s	2.42 μ s
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	2.41 μ s	2.41 μ s	2.42 μ s
Standard deviation	12.7 ns	15.5 ns	19.3 ns

Outlying measurements have no (0.515%) effect on estimated standard deviation.

genericField / toField / EitherGeneric Int Char

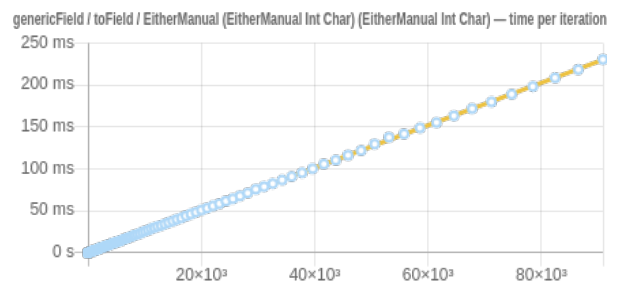
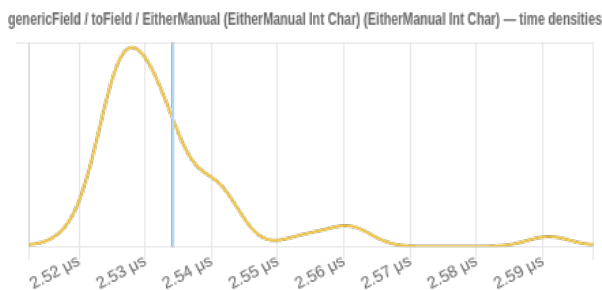


lower bound estimate upper bound

OLS regression	2.40 μ s	2.41 μ s	2.41 μ s
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	2.40 μ s	2.40 μ s	2.41 μ s
Standard deviation	7.27 ns	10.2 ns	15.4 ns

Outlying measurements have no (0.515%) effect on estimated standard deviation.

genericField / toField / EitherManual (EitherManual Int Char) (EitherManual Int Char)



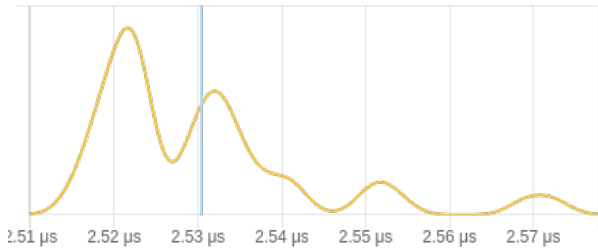
lower bound estimate upper bound

OLS regression	2.53 μ s	2.53 μ s	2.54 μ s
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	2.53 μ s	2.53 μ s	2.54 μ s
Standard deviation	8.17 ns	12.7 ns	22.0 ns

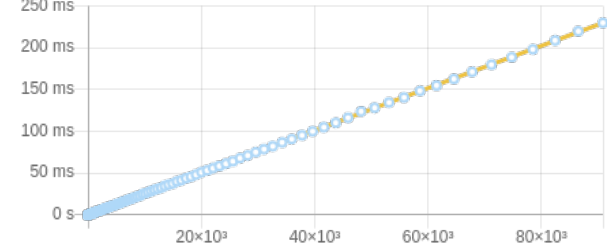
Outlying measurements have no (0.518%) effect on estimated standard deviation.

genericField / toField / EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)

genericField / toField / EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char) — time densities



genericField / toField / EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char) — time per iteration



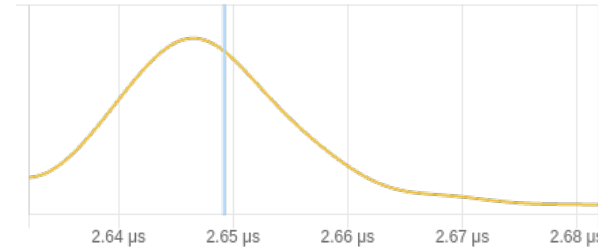
lower bound estimate upper bound

OLS regression	2.52 μs	2.53 μs	2.53 μs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	2.53 μs	2.53 μs	2.54 μs
Standard deviation	9.76 ns	12.9 ns	19.4 ns

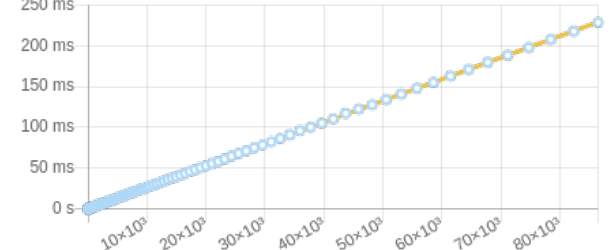
Outlying measurements have no (0.518%) effect on estimated standard deviation.

genericField / toField / EitherManual (EitherManual Int Char) (EitherManual Int Char) (EitherManual (EitherManual Int Char) (EitherManual Int Char))

genericField / toField / EitherManual (EitherManual (EitherManual Int Char) (EitherManual Int Char) (EitherManual Int Char)) — time densities



genericField / toField / EitherManual (EitherManual (EitherManual Int Char) (EitherManual Int Char) (EitherManual Int Char)) — time per iteration

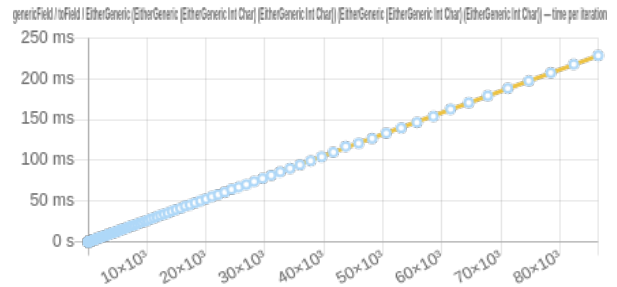
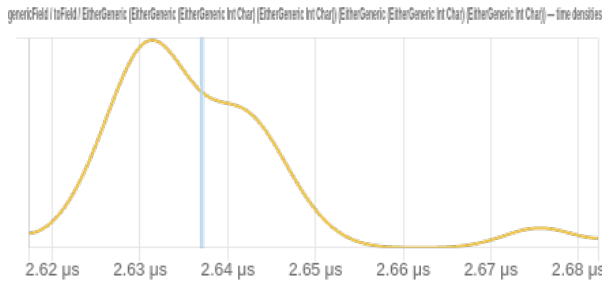


lower bound estimate upper bound

OLS regression	2.65 μs	2.65 μs	2.65 μs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	2.65 μs	2.65 μs	2.65 μs
Standard deviation	6.58 ns	8.70 ns	12.0 ns

Outlying measurements have no (0.521%) effect on estimated standard deviation.

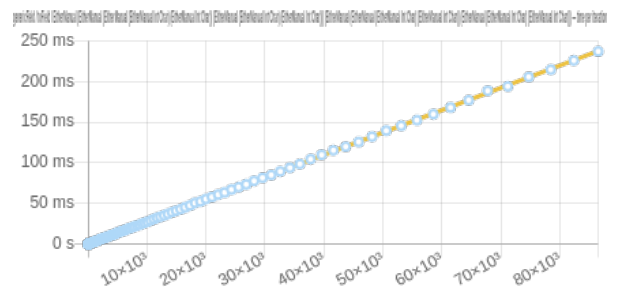
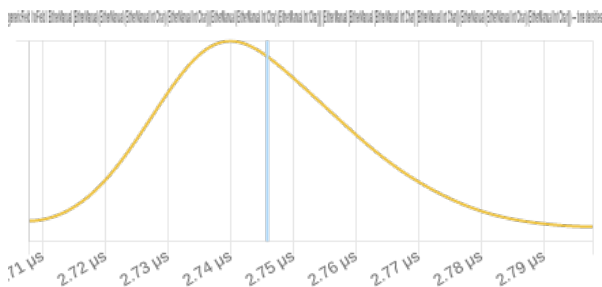
genericField / toField / EitherGeneric (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char))



	lower bound	estimate	upper bound
OLS regression	2.64 μ s	2.64 μ s	2.64 μ s
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	2.63 μ s	2.64 μ s	2.64 μ s
Standard deviation	6.81 ns	10.9 ns	16.6 ns

Outlying measurements have no (0.521%) effect on estimated standard deviation.

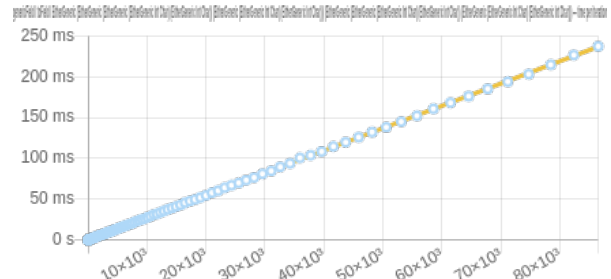
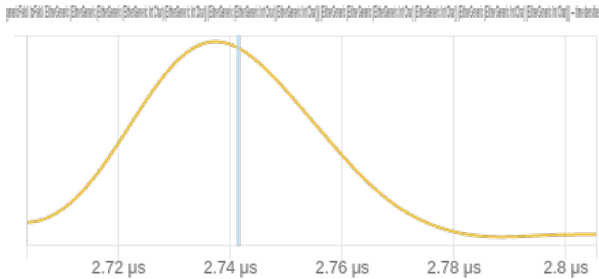
genericField / toField / EitherManual (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual (EitherManual Int Char) (EitherManual Int Char)) (EitherManual (EitherManual Int Char) (EitherManual Int Char)))



	lower bound	estimate	upper bound
OLS regression	2.74 μ s	2.74 μ s	2.75 μ s
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	2.74 μ s	2.75 μ s	2.75 μ s
Standard deviation	12.6 ns	15.6 ns	20.6 ns

Outlying measurements have no (0.521%) effect on estimated standard deviation.

genericField / toField / EitherGeneric (EitherGeneric (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char))) (EitherGeneric (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)) (EitherGeneric (EitherGeneric Int Char) (EitherGeneric Int Char)))



	lower bound	estimate	upper bound
OLS regression	2.73 μs	2.74 μs	2.74 μs
R ² goodness-of-fit	1.00	1.00	1.00
Mean execution time	2.74 μs	2.74 μs	2.75 μs
Standard deviation	12.3 ns	15.9 ns	23.9 ns

Outlying measurements have no (0.521%) effect on estimated standard deviation.

understanding this report

In this report, each function benchmarked by criterion is assigned a section of its own.

- The chart on the left is a [kernel density estimate](#) (also known as a KDE) of time measurements. This graphs the probability of any given time measurement occurring. A spike indicates that a measurement of a particular time occurred; its height indicates how often that measurement was repeated.
- The chart on the right is the raw data from which the kernel density estimate is built. The x-axis indicates the number of loop iterations, while the y-axis shows measured execution time for the given number of loop iterations. The line behind the values is the linear regression estimate of execution time for a given number of iterations. Ideally, all measurements will be on (or very near) this line. The transparent area behind it shows the confidence interval for the execution time estimate.

Under the charts is a small table. The first two rows are the results of a linear regression run on the measurements displayed in the right-hand chart.

- *OLS regression* indicates the time estimated for a single loop iteration using an ordinary least-squares regression model. This number is more accurate than the *mean* estimate below it, as it more effectively eliminates measurement overhead and other constant factors.
- *R²; goodness-of-fit* is a measure of how accurately the linear regression model fits the observed measurements. If the measurements are not too noisy, R²; should lie between 0.99 and 1, indicating an excellent fit. If the number is below 0.99, something is confounding the accuracy of the linear model.
- *Mean execution time* and *standard deviation* are statistics calculated from execution time divided by number of iterations.

We use a statistical technique called the [bootstrap](#) to provide confidence intervals on our estimates. The bootstrap-derived upper and lower bounds on estimates let you see how accurate we believe those estimates to be.

A noisy benchmarking environment can cause some or many measurements to fall far from the mean. These outlying measurements can have a significant inflationary effect on the estimate of the standard deviation. We calculate and display an estimate of the extent to which the standard deviation has been inflated by outliers.

colophon

This report was created using the [criterion](#) benchmark execution and performance analysis tool.

Criterion is developed and maintained by [Bryan O'Sullivan](#).