Table 1. Median values and 68% confidence interval for OGLE-TR-1034.

Parameter	Units	Values
Stellar Parameters:		
M_*	Mass ($M_\odot$)	$0.782^{+0.032}_{-0.022}$
R_*	Radius ($R_\odot$)	1.434 ± 0.061
$R_{*,SED}$ ..	Radius[1] ($R_\odot$)	$1.632^{+0.089}_{-0.086}$
L_*	Luminosity ($L_\odot$)	$3.36^{+0.51}_{-0.44}$
F_{Bol}	Bolometric Flux (cgs)	$0.0000000000539^{+0.0000000000050}_{-0.0000000000041}$
ρ_*	Density (cgs)	$0.378^{+0.053}_{-0.044}$
$\log g$	Surface gravity (cgs)	$4.022^{+0.041}_{-0.037}$
$T_{\rm eff}$	Effective Temperature (K)	6530^{+210}_{-200}
$T_{\rm eff,SED}$ ..	Effective Temperature[1] (K)	6130^{+210}_{-190}
[Fe/H]..	Metallicity (dex)	$-4.480^{+0.080}_{-0.059}$
$[{\rm Fe/H}]_0$.	Initial Metallicity[2]	$-3.920^{+0.090}_{-0.056}$
Age	Age (Gyr)	$12.0^{+1.3}_{-1.6}$
EEP	Equal Evolutionary Phase[3]	435.7 ± 3.7
A_V	V-band extinction (mag)	$4.76^{+0.16}_{-0.34}$
σ_{SED}	SED photometry error scaling	$9.1^{+1.6}_{-1.3}$
ϖ	Parallax (mas)	$0.709^{+0.038}_{-0.036}$
d	Distance (pc)	1409^{+75}_{-72}
Planetary Parameters:		b
P	Period (days)	$5.4047713^{+0.0000049}_{-0.0000050}$
R_P	Radius ($R_{\rm J}$)	$2.02^{+0.11}_{-0.10}$
M_P	Mass[4] ($M_{\rm J}$)	$0.4046^{+0.0070}_{-0.015}$
T_C	Time of conjunction[5] ($\rm BJD_{TDB}$)	2455377.5239 ± 0.0015
T_T	Time of minimum projected separation[6] ($\rm BJD_{TDB}$)	2455377.5239 ± 0.0015
T_0	Optimal conjunction Time[7] ($\rm BJD_{TDB}$)	$2456626.02611 \pm 0.00097$
a	Semi-major axis (AU)	$0.05554^{+0.00075}_{-0.00052}$
i	Inclination (Degrees)	$85.05^{+0.44}_{-0.41}$
T_{eq}	Equilibrium temperature[8] (K)	1598^{+54}_{-53}
$\tau_{\rm circ}$	Tidal circularization timescale (Gyr)	$0.046^{+0.014}_{-0.010}$
K	RV semi-amplitude[4] (m/s)	$54.6^{+1.6}_{-2.4}$
R_P/R_* ..	Radius of planet in stellar radii	0.1449 ± 0.0021
a/R_* ...	Semi-major axis in stellar radii	$8.36^{+0.37}_{-0.34}$
δ	$\left(R_P/R_*\right)^2$	0.02099 ± 0.00061
$\delta_{\rm I}$	Transit depth in I (fraction)	0.02140 ± 0.00046
$\delta_{\rm V}$	Transit depth in V (fraction)	$0.02163^{+0.00045}_{-0.00044}$
τ	Ingress/egress transit duration (days)	$0.0445^{+0.0051}_{-0.0047}$
T_{14}	Total transit duration (days)	$0.1843^{+0.0039}_{-0.0038}$

Table 1 continued on next page

Table 1 *(continued)*

Parameter	Units	Values	
T_{FWHM} ..	FWHM transit duration (days)	$0.1398^{+0.0034}_{-0.0035}$	
b	Transit Impact parameter	$0.720^{+0.029}_{-0.036}$	
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5μm (ppm)	833^{+91}_{-89}	
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0μm (ppm)	2300 ± 160	
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5μm (ppm)	3080 ± 180	
ρ_P	Density[4] (cgs)	$0.0601^{+0.010}_{-0.0084}$	
$logg_P$ ...	Surface gravity[4]	$2.386^{+0.046}_{-0.044}$	
Θ	Safronov Number	$0.0281^{+0.0018}_{-0.0017}$	
$\langle F \rangle$	Incident Flux (10^9 erg s^{-1} cm^{-2})	$1.48^{+0.21}_{-0.19}$	
T_P	Time of Periastron (BJD$_{\rm TDB}$)	2455377.5239 ± 0.0015	
T_S	Time of eclipse (BJD$_{\rm TDB}$)	2455380.2263 ± 0.0015	
T_A	Time of Ascending Node (BJD$_{\rm TDB}$)	2455381.5775 ± 0.0015	
T_D	Time of Descending Node (BJD$_{\rm TDB}$)	2455378.8751 ± 0.0015	
V_c/V_e ...	.....	1.00	
$M_P \sin i$.	Minimum mass[4] ($M_{\rm J}$)	$0.4031^{+0.0069}_{-0.015}$	
M_P/M_* .	Mass ratio[4]	$0.000490^{+0.000019}_{-0.000026}$	
d/R_* ...	Separation at mid transit	$8.36^{+0.37}_{-0.34}$	
P_T	A priori non-grazing transit prob	$0.1024^{+0.0041}_{-0.0042}$	
$P_{T,G}$	A priori transit prob	$0.1370^{+0.0059}_{-0.0060}$	
Wavelength Parameters:		I	V
u_1	linear limb-darkening coeff	$0.215^{+0.052}_{-0.051}$	$0.336^{+0.053}_{-0.051}$
u_2	quadratic limb-darkening coeff	0.301 ± 0.050	$0.309^{+0.050}_{-0.052}$
Transit Parameters:		OGLE UT 2010-06-30 (I)	OGLE UT 2010-06-30 (V)
σ^2	Added Variance	$0.00002204 \pm 0.00000042$	$0.0000322^{+0.0000055}_{-0.0000048}$
F_0	Baseline flux	1.000189 ± 0.000055	1.00030 ± 0.00050

See Table 3 in Eastman, J. et al., 2019, arXiv:1907.09480 for a detailed description of all parameters

[1] This value ignores the systematic error and is for reference only

[2] The metallicity of the star at birth

[3] Corresponds to static points in a star's evolutionary history. See §2 in Dotter, A., 2016, ApJS, 222, 8

[4] Uses measured radius and estimated mass from Chen, J., & Kipping, D. 2017, ApJ, 834, 17

[5] Time of conjunction is commonly reported as the "transit time"

[6] Time of minimum projected separation is a more correct "transit time"

[7] Optimal time of conjunction minimizes the covariance between T_C and Period

[8] Assumes no albedo and perfect redistribution